

WALL STREET AND LOMBARD STREET

*The Stock Exchange Slump of 1929
and the Trade Depression of 1930*

BY
FRANCIS W. HIRST

NEW YORK
THE MACMILLAN COMPANY

1931

**COPYRIGHT, 1931,
BY THE MACMILLAN COMPANY.**

All rights reserved—no part of this book
may be reproduced in any form without
permission in writing from the publisher.

Set up and electrotyped. Published, April, 1931.

**SET UP BY BROWN BROTHERS LINOTYPERS
PRINTED IN THE UNITED STATES OF AMERICA
BY THE FERRIS PRINTING COMPANY**

INTRODUCTORY

IN selecting a title for this small book, I was influenced by the first sentence of Bagehot's masterpiece: "I venture to call this Essay 'Lombard Street,' and not the 'Money Market,' or any such phrase, because I wish to deal, and to show that I mean to deal, with concrete realities." The astounding collapse of Overend Gurney & Co. and the panic which ensued, not long after Bagehot assumed the editorship of the *Economist*, were the original incentives to a long series of articles in that paper. These "obiter scripta," or occasional writings, were matured and eventually collected in 1873, seven years later, to form the Essay, or collection of essays, which constitute Bagehot's famous contribution to banking theory and practice, a contribution which time has not dulled nor later experience impaired.

I was appointed to the Chair of the *Economist* nearly thirty years after Bagehot's death, and only a year before the American crisis and panic of 1907. During that anxious time I was in close touch with the Bank of England and was largely guided in my criticisms by the sagacious advice of the late Mr. H. W. Search, then head of the Discount Department and an ardent but critical admirer of my cele-

brated predecessor. In the following year, when I visited the United States, the late Senator Aldrich invited me to co-operate with the Monetary Commission. Its members were then beginning the investigations that led up to their Report, and ultimately to the establishment, in President Wilson's first term, of a new and scientific system designed, under the control of the Federal Reserve Board, to govern and regulate the money and credit of the United States. On the successes and imperfections of that system Mr. Paul Warburg and other distinguished American authorities, with whose intimate knowledge and practical experience I cannot compete, have written at length. But whatever its faults the reformed system, to which both Republicans and Democrats have contributed their best thought, is entitled to high praise; for it surmounted the War panic in the autumn of 1914 and prevented the colossal slump of Wall Street in October, 1929, from degenerating into a total collapse of credit like that which precipitated a general suspension of cash payments throughout the United States after the panic of 1907.

This little essay of mine, ambitious in extent but modest in length, begins with a narrative of the events in Wall Street during October and November, 1929, when I was convalescing after a severe illness in the New York Hospital, a morbid but not indifferent spectator of a national catastrophe which was to turn the whole economic and political world upside down.

In tracing the headlong and disastrous course of this torrent from Wall Street to London, from the Stock Exchange to business, I have allowed my eye to roam all over the world and my mind to dwell upon other political occurrences and historical causes dating from the the Great War and the settlement, or rather unsettlement, which followed it. For this extensive view no apology is really needed. The examination of a world-wide malady cannot be confined to a diagnosis of conditions in a single country, however great and powerful; for after all, the United States is, as it were, only one limb of the political and economic leviathan, a huge body corporate of interdependent societies and nations.

A complete financial and economic history of the Wall Street panic and collapse of October-November, 1929, would comprise an account of the bull market from 1927 onwards and of the New York money market, together with the concomitant features of the London money market and of gold movements. It would trace in detail the ups and downs of American Stock Exchange prices for at least twelve months down to the week ending Saturday, October 25, 1930. In that week the average prices of shares in Wall Street reached the lowest level for more than two years, and the Republican administration at Washington, under the leadership of President Hoover, abandoning in practice the theory so long maintained that trade was about to revive, proclaimed the necessity of dealing energeti-

cally with unemployment by schemes of relief which, in the absence of unemployment benefit or systematic Poor Law, would at least stave off wholesale starvation, or acute destitution in industrial districts. In the course of his examination our historian would seek causal connections between the Stock Exchange collapse, the collapse of many commodity markets, and the depressed condition of business, not only in the United States but in other countries. Such an interpretation of economic history must be on a scale resembling rather Gibbon's *Decline and Fall* than Bryce's brilliant essay or sketch of the Holy Roman Empire. My own ambition will be amply fulfilled if, at this stage, while the events are still fresh and the losses still recent, I can provide an outline of the great disaster and place in due perspective and proportion its main causes and consequences, and so provide new guidance to investors and some new warnings to speculators in the future.

This method of treatment relieves me of the task, usually undertaken in a preface, of stating in detail obligations which would cover many pages of print. The account of the collapse in Wall Street is based upon reading day after day the minute descriptions, not wanting in colour, of the three great newspapers of New York—the *Times*, the *Herald Tribune* and the *World*—to which I would add the meditative criticisms of the *Commercial and Financial Chronicle* and of the London *Economist*. I dare not attempt a bibliography of the new literature which I have ex-

amined, or of the much larger mass of material which I have not examined, in the last year. My thanks to other writers must therefore be conveyed in vague and general terms; but I must express a special obligation to the British Broadcasting Corporation and to its weekly organ, the *Listener*, for allowing me to use freely a series of talks which I gave in the summer of 1930.

I am indebted to Miss P. G. Maclagan for much help throughout. But for her skilled assistance I should hardly have been able to undertake the book, and I should certainly have fallen into many more inaccuracies than those (few I hope) which sharp-eyed experts may detect and expose.

CONTENTS

	PAGE
INTRODUCTORY	v
I. THE WALL STREET COLLAPSE	
CHAPTER	
I. THE BOOM, 1927 TO 1929	3
II. OCTOBER, 1929	15
III. NOVEMBER, 1929	36
IV. DECEMBER, 1929	56
V. TWELVE MONTHS AFTERWARDS	64
II. THE SEQUEL	
LOMBARD STREET AND THE TRADE DEPRESSION OF 1930	
I. LOMBARD STREET AND THE DEPRESSION	77
II. MONEY MARKETS AND BANKERS	91
III. THE COLLAPSE OF PRICES AND THE FLIGHT OF THE CULTIVATOR	108
IV. SPECULATION IN THEORY AND PRACTICE	123
V. CAUSES AND REMEDIES	147
INDEX	177

I. THE WALL STREET COLLAPSE

CHAPTER I.

THE BOOM, 1927 to 1929

AN upward movement of American stocks and shares in Wall Street, which was to be blown by a nation-wide gambling mania into the splendidly iridescent but fragile and transitory bubble that burst two years later, started on its course in 1927. In the second half of that year, to quote a leading authority, the Federal Reserve System "under a daring but carefully devised plan" reduced its discount rate to $3\frac{1}{2}$ per cent, purchased Government securities on a large scale, and embarked upon a policy of easing money in the United States, partly to encourage trade and enterprise, partly to assist other countries, and especially Great Britain, in stabilizing depreciated currencies and re-establishing the gold standard. That such a policy would stimulate speculation became evident at the end of the year, and in the early months of 1928 the Federal Reserve Board, changing its course, raised its discount rate by three successive increases to 5 per cent in July of that year. But fear of "hurting business" and of interfering with profitable Stock Exchange activities prevented the adoption of any drastic policy, and the 5 per cent rate had practically no effect in restraining that

4 WALL STREET AND LOMBARD STREET

exuberant spirit of speculation which was gripping "all classes in all parts of the country." In February, 1929, and again in April, the Board issued warnings, and in May several breaks occurred in the stock market. It was feared then that "frantic liquidation might degenerate into a panicky stampede," and for that reason, perhaps, the Board decided against a recommendation of the Advisory Council to increase the discount rate to 6 per cent. Meanwhile the New York banks came to the assistance of the bulls, instead of encouraging, as they should have done in Mr. Warburg's judgment, "a quiet but persistent liquidation."¹

By this time the intrinsic weakness of the market was unmistakable to experienced observers. The prices of most railroad and industrial stocks could not be justified by past dividends or by any reasonable hope of immediate expansion, though well-known bankers and business men and even some economists of repute declared that "a new era" had arrived which would justify still further rises in stock values by a marvelous growth of earnings. Some ten billions of dollars in securities were already carried by brokers' loans and bank loans to support a nation-wide borrowing on margins to finance stock exchange speculation. But most of the leading bankers ignored the danger, and "the tottering brokers'

¹ See Mr. Paul M. Warburg's book *The Federal Reserve System*, Vol. I, Addendum II on The Stock Exchange Crisis of 1929. The Macmillan Company, 1930.

loan structure was permitted to rise by another billion dollars, while numberless investment trusts . . . operating to produce a further pyramiding of prices, were floated almost from day to day, and Stock Exchange quotations soared to new fantastic levels." At last on August 9, 1929, the Federal Reserve Board allowed the New York Reserve Bank to raise its rate to 6 per cent; but it was too late to sober the "frenzied mind of those wedded to the gospel of investing and speculating in inflated stocks." After blaming the Board for failing to arrest the Stock Exchange debauch, Mr. Warburg adds:

In fairness it must be admitted, however, that any Board—no matter what its constitution—would have found it a Herculean, if not an impossible, task to perform its functions wisely and efficiently in circumstances such as surround it at present. In a country whose idol is prosperity, any attempt to tamper with conditions in which easy profits are made and people are happy, is strongly resented. It is a desperately unpopular undertaking to dare to sound a discordant note of warning in an atmosphere of cheer, even though one might be able to forecast with certainty that the ice, on which the mad dance was going on, was bound to break. Even if one succeeded in driving the frolicking crowd ashore before the ice cracked, there would have been protests that the cover was strong enough and that no disaster would have occurred if only the situation had been left alone.

The Board, much to its credit, had the courage to warn the country, but it stayed its hand when it should have driven the people ashore before the ice broke. It hesitated to sacrifice what appeared to the country to be actual pros-

6 WALL STREET AND LOMBARD STREET

perity to what might have seemed to the people a problematical disaster.

Many other authorities in the United States agree with the two main conclusions drawn from the Stock Exchange panic of 1929 by Mr. Paul Warburg: first that a banking collapse even more disastrous than that of 1907 was averted by the existence of the Federal Reserve System and the vast improvement thereby effected in the currency and banking of the United States; and secondly that, as at present constituted, the Federal Reserve Board is too much exposed to interference from politics and business, and that a more expert and independent administration is needed to unite and regulate the action of the Reserve Banks.

However that may be; and however true the argument that cheap money helped to stimulate the boom which dearer money might have kept within bounds; and however true it may also be that the scarcity of money and the drain of gold to New York to earn the high rates offered in the summer of 1929, and finally the rise of the London bank rate to $6\frac{1}{2}$ per cent on September 26th, precipitated the Stock Exchange crisis and slump of October—it is still true that the calamity we are now about to describe proceeded from the natural propensity of mankind to speculate and gamble, a propensity which has never manifested itself on such a scale, or by a nation so wealthy, as it did during 1928 and 1929 in the United States.

The relationship between the boom in stocks and the price of money was indeed very close, as might be expected when the whole nation—almost every town and village in the United States—was buying shares on margin with money borrowed from the banks. It was no casual coincidence that the high prices paid for securities were accompanied by very high rates for money. Thus at the end of March (to quote *The New York Times*) call money renewed at the money post of the Stock Exchange at 12 per cent, advanced to 15 per cent, 17 per cent and finally to 20 per cent, almost causing a panic. "The crisis was broken when the National City Bank put into the market funds secured by discounting in defiance of the Reserve Board's warning." After severe squeezes in March and April, an easier tone developed in May; but at the end of June the call-rate rose to 10 and 15 per cent. In August, call-money rates varied from 12 to 6 per cent, and in September they were usually from 8 to 10 per cent, while time money advanced to over 9 per cent. Towards the end of that month, a decline in share prices weakened call money, while time money remained at 9 per cent, influenced by the high discount rates of London and other European centres. •

Thus, while stocks and marginal speculation governed money up to September, a reverse process began in October; and with a downward movement of stocks the stringency of the money market relaxed as the demand for accommodation by Stock Ex-

8 WALL STREET AND LOMBARD STREET

change speculators diminished. When this demand ended and a rapid decline in trade reduced the volume of commercial bills all over the world, the famine in gold disappeared and the scramble for it ceased so completely that for many months the precious metal, whose scarcity had forced up bank rates, seemed to be superabundant and, as it were, a glut in the world's money markets.

In September, while Wall Street prices were fluctuating uneasily, a disaster occurred in London which brought the crash in New York perceptibly nearer. An unscrupulous financier, who went by the name of Clarence Hatry, had formed a miscellaneous combination known as the Hatry group of companies, including various worthless concerns, bought with money obtained from the banks, largely by forgery of municipal stock certificates. Details of this colossal swindle need not be retold here. Those who desire to refresh their memories of it will find the story of the Hatry crisis in the *Economist* of September 28, 1929. Enough that Photomaton and other disreputable shares of the group, which had risen far above their nominal value, began to slump in the middle of September. The crash came on September 20th, and soon after the opening of the London Stock Exchange permission to deal in the Hatry "securities" was suspended by the General Purposes Committee. The arrest and conviction of Hatry and his accomplices followed; but the heavy losses inflicted upon members of the Stock Exchange and a

credulous public cast a gloom over the city, and many weeks elapsed before the *débris* was cleared away.

This disaster to Stock Exchange gamblers was followed on Thursday, September 26th, by a rise in the official discount rate of the Bank of England from the high rate of $5\frac{1}{2}$ per cent, to which it had been raised on February 7th, to the very high rate of $6\frac{1}{2}$ per cent. Since the middle of June the Bank of England had been losing gold. In two months the Proportion of Reserve to Liabilities shrank from 57 to 27 per cent, and for some time the gold stock had been considerably below the 150 million limit or minimum suggested by the Cunliffe Committee. Whether the action of the Bank in raising its rate was right or wrong need not be discussed here; but it is certain that it hastened the downfall of speculation in the United States, though for several weeks longer quiet liquidation by shrewd bankers and business men was offset by the continued fervour and desperate belief of the gambling public that their favourite stocks would resume the rise, which had continued with minor interruptions for several years, until "the new era" arrived with Stock Exchange fortunes for everybody and nation-wide prosperity. Everyone, as the *Commercial and Financial Chronicle* of New York put it, "became seized with the idea that it was possible to get rich overnight by simply taking flyers in the stock market." Everyone was fascinated by the fluctuations on the Stock Exchange; everyone believed in the rising market, and

everyone was eager to participate therein. Many people were ready to borrow to the utmost limit of their credit and to stake their last dollar on the gambling table.

Describing the furious passion which drove Roman gamblers to the dice box, the Roman satirist wrote:

Alea quando
Hos animos? Neque enim loculis comitantibus itur
Ad casum tabulæ, posita sed luditur arca.¹

All over America tens of thousands of professional operators had communicated the art of Stock Exchange gambling to millions. Scrubwomen, porters, elevator boys, typists, bootblacks, soda-fountain attendants, actors and actresses, school teachers and nurses, barbers, chauffeurs, in fact the whole population, rich and poor, one and all, fell a prey to the consuming craze for speculation. It seemed as if all economic law had been suspended and a new era opened up in which success and prosperity could be had without knowledge or industry. Comparatively little of the money lost was turned to good account by the gainers, though the stock exchangers had nine months of extraordinary profits. People were living in a world of illusion. "The stock market gains led to extravagant spending and extravagant living, everyone feeling while stock prices were rising that

¹ Juvenal I, 88. "When was dicing so furious? Today, instead of going to the hazard of the table purse in hand men stake their whole fortune on a throw."

he could afford to be generous with his supposed gains." ^a Before the crash, all the luxury trades thrived enormously; after it, they were put out of commission, and secondhand luxuries, such as cars, furs, gramophones and jewelry, were drugs in the market.

I recollect at a London gathering of economists early in 1929 a discussion of the Stock Exchange boom in New York. One or two of those present had recently crossed the Atlantic and impressed upon us that the favourite speculative counters, which were then the more active industrial stocks and the shares of public utility corporations, had advanced to prices extravagantly high in proportion to yield or dividend or to any probable future estimate. We all agreed, I think, that a slump or a crash was then probable and that the best thing that could happen would be a gradual decline—the "creeping bear" market which Colonel Ayres predicted a few weeks before the crash occurred.

In September I was visited by a friend from New York, who is a director of a large industrial company. On hearing that I was about to cross and to spend a few weeks in the United States, he told me about conditions as he saw them, and said that his corporation had already decided not to hold any shares but to put their money out at safe terms in the short loan market. He anticipated a crash and said that he thought it would very likely occur while I was in the United States. So it did; but a severe

^a See *Commercial and Financial Chronicle*, October 26, 1929.

illness overtook me and I was lying in the New York Hospital when the first great October break occurred. By that time, I was just well enough to take a little interest in the outside world, and discovered that my nurse had been caught in the mania, having been interested by her broker in one of the common stocks which was now declining rapidly, instead of rising from the absurdly high price at which she had bought it to a still more impossible peak. Later on she told me how another nurse, a friend of hers, who, after many years of hard work was on the point of retiring, had lost all her savings, including some successful speculations (altogether about 30,000 dollars) in the slump. The unfortunate woman had used her capital to buy stocks on margin, and in the end all that she had was swept away.

After the crash, several writers, including no less an authority than Professor Irving Fisher of Yale, sought to explain the heavy fall, which had falsified their predictions of a continued rise, by the theory of mob psychology. The price level, they declared, was not too high; the long bull market was justifiable and ought to have been extended. Prices fell simply because a mob of stupid and ignorant speculators all over the United States suddenly took fright and began to sell. This explanation will not hold water. As a matter of fact the mob of small speculators held on till the last moment, whereas many of the big speculators, being better informed and impressed by the selling movements from London and the Con-

tinient, began to liquidate in September and unloaded their holdings on the market, which was consequently weakened. This weakness was intensified towards the end of September, and there were several awkward spells in the first half of October. But the great mass of the general public still held on, believing firmly, or hoping desperately, that its favourite counters would soon recover and resume their upward movement.

What brought about the final collapse was a new development—the calling-in of loans not by the banks but by the outside lenders. The total amount thus called in during the last week of October was computed by the *Financial Chronicle* at over two thousand million dollars. This forced upon the market a torrent of stock in the last days of October, and so ruined many thousands of speculators who, having bought on margin to the limits of their credit, lost everything when their margins were swept away in this flood of liquidation.

During my convalescence I met many old friends and made many new acquaintances. I was astonished to find how widespread had been the gambling mania and how many had ventured their all. A wealthy man told me that his butler had won 10,000 dollars at the height of the boom and lost it all in the crash. It was not so much the mere buying of stocks as the buying of them with borrowed money that brought bankruptcy and destitution and led so many desperate men to commit suicide. During the first

and second collapses margins were wiped out so rapidly that several big credit institutions were shaken to their foundations. In spite of their immense resources, efforts by a big bankers' pool to support the market proved a failure, though they succeeded in propping up some respectable firms and a few of the better class investment trust companies. President Hoover very wisely refused to allow his administration to give artificial support to the stock markets like that which had been found for the wheat farmers and the cotton growers. He did all that it was possible to do by reassuring the country with messages as to the state of trade and the soundness of credit. Here and there, there were runs on particular banks; but bad news was not allowed to spread, and the country was spared the general collapse of credit which had taken place during the panic of 1907.

CHAPTER II.

OCTOBER, 1929

PROFESSOR IRVING FISHER in his statistical study and ingenious survey of the great collapse entitled *The Stock Market Crash and After*,¹ remarks: "The most rapid and precipitous decline of stock prices in the history of American security tradings commenced on September 6th, 1929, and continued, with only minor recoveries, until November 13th, after extraordinary measures had been taken to check the panic." It is not easy indeed to say precisely when the boom ended or when the slump really began, still less to date the conclusion of the long *malaise* which followed the partial and temporary recovery of November-December, 1929. Professor Irving Fisher, for example, quotes from his own daily industrial stock index.² On August 7th it stood at 195. On August 8th the unexpected advance in the New York Federal Reserve Rate from 5 to 6 per cent (a precursor of the slump) reduced it to 191, while the average for railroad stock fell from 152 to 149 and of public utilities from 239 to 233; but bullish enthusiasm resumed its sway, and the market averages

¹ The Macmillan Company, New York, 1930.

² I leave out the decimals.

found new high levels—railroads on September 4th rising to 163, industrial stocks on September 7th to 211, and public utilities to a high record of 267, so late as September 24th. But by the end of September a substantial decline in all these three favourite classes of speculative stocks was recorded. On September 30th, the industrial stock average stood at 198, while that for railroad shares had declined to 151 and public utilities to 250.

The selling movement, or more accurately the prevalence of bearish liquidation over bullish purchases, culminated for a time on October 4th, and on October 14th brokers' reports, published in the New York newspapers, indicated that the subsequent recovery had induced a revival of professional optimism, though several firms advised caution, and one took the view "that a secondary reaction is not far off, and that it will develop just as soon as the new buying power, which is based primarily on appreciation of securities held, exhausts itself." Such exhaustion would "leave the market in an unhealthy technical position with a very large part of the short interest eliminated." But a far commoner view was expressed thus: "We look for a broad and higher market during the coming week." After some considerable but irregular declines in the stock market, which were checked, temporarily, by a fall in the call-money rate to 5 per cent (the lowest since August, 1928) *The New York Times* on October 10th noted "a disposition among brokers and statis-

tical agencies this week to advise the sale of all but the best securities and the elimination of low-priced issues." A well-known statistical agency advised its readers to go through their portfolios with a fine-tooth comb and weed out all issues not of first-class merit which had not immediately ahead of them unusually good prospects, or were not of a character which the owner would be willing, if necessary, to carry through a further reaction in average prices. The agency held that "the unbridled enthusiasm for so-called 'equities' is not a thing which can endure indefinitely, and that ultimately prices of even the best common stocks must return to a level where they can either be justified by current income or by probable income at some reasonably near future time." Meanwhile leading Stock Exchange houses indicated that their loans had been sharply reduced during the week, and this was confirmed by a contraction of brokers' loans from the high level of October 2nd.

As an example of the battle between bulls and bears over favourite gambling counters, the following paragraph may be quoted from *The New York Times* of October 10th.

There was evidence yesterday in one particular instance that bears had stepped squarely into a trap, and that it had clicked shut on their hind legs. This was in General Electric. The bear contingent had sold the stock on the theory that it was too high, that it did not act well in the market and that, finally, being a pivotal stock, weakness in "GE" would be reflected throughout the list. The stock opened at 355 yester-

day and ran down to 348. Its action on the tape was discouraging, to say the least. Suddenly, when it hit that figure, the buying which had been assembled struck the market. In less than two hours General Electric had gained 19 points, and it sold up to 368 $\frac{3}{4}$, closing at 367, a net rise for the day of 10 $\frac{1}{2}$ points.

But in spite of continued optimism and warnings against bearish hysteria and declarations that "masses of stock have passed from weakly held margin accounts during the last few days to buyers who have no need for advances on their purchases," the period of indecision was rapidly drawing to an end, and the softening influence of cheap money availed nothing to stop the deluge. By October 16th reaction was in strong evidence and people were talking of a "creeping bear market." In his mid-month survey of business conditions, Col. Leonard P. Ayres, of the Cleveland Trust Company, compared conditions with "the rich man's panic of 1903," which J. P. Morgan had attributed to an excessive accumulation of undigested securities. During 1929 there had been lavish outpourings of new securities and a mushroom growth of investment trusts; nor was the public any longer swallowing the new issues with its old avidity. Stocks, he thought, had been passing from clear-sighted speculators into the hands of ignoramuses.

On the other hand, Professor Irving Fisher, in a defence of investment trusts before members of the Purchasing Agents' Association on October 15th, ex-

pressed his belief that stock prices were on "what looks like a permanently high plateau," and declared, in reply to a question, that he expected "to see the stock market a good deal higher than it is to-day within a few months." He sharply disagreed with Mr. Roger W. Babson's prediction (in September) of a 50- to 60-point break, though he admitted that many market operators would do well to get out of debt and out of margin account. It was a hopeful sign, in his view, that speculative activities were gravitating into the hands of skilled investment trusts, which could apply their special knowledge to diversify risks by diversifying their holdings among common and preferred stocks, or bonds foreign and domestic. On the same day, before sailing for Europe, Mr. Charles E. Mitchell, President of the National City Bank, who had done his best to assist the boom by supplying the money market with funds, declared to the Press: "I see no reason for the end of the year slump which some people are predicting." Prices had been shaken down to conservative levels and markets generally were in a healthy condition. There was general prosperity, and he anticipated that it would increase.

But that very day the slump began. On October 16th the *New York Herald Tribune* remarked that the "creeping bear" market depicted by Colonel Ayres "grew into 'a raging bruin' yesterday," when prices dropped from 5 to 30 dollars a share, the sharpest decline since October 4th. Next day, Octo-

ber 16th, prices crumpled still further, the downward movement being assisted by a severe break in wheat and reports of declining activity in the steel industry. After a brief recovery on October 17th, the market turned weak again on Friday the 18th, and on Saturday morning, October 19th, to quote *The New York Times*:

Reactionary forces took control of the stock market yesterday and, with a devastating sweep, reduced the value of listed securities to the lowest levels reached on the current decline. In the two hours to which trading was limited on the New York Stock Exchange active issues passed through one of the widest breaks in history. Final quotations revealed net losses ranging from 5 to 20 points and the aggregate depreciation in open market values was estimated at \$1,000,000,000 or more.

The total turnover was 3,488,100 shares, which represented the second heaviest volume for a Saturday since the Stock Exchange was established. During the first half-hour trading was at a rate of more than 8,500,000 shares for a full five-hour day. The stock market community did not know until an hour and twenty-three minutes after the 12 o'clock closing gong what the final prices were, so late was the overburdened ticker. . . . Little speculators, still clinging to their long commitments, were bowled over by the hundreds, adding to the already large list of casualties in the earlier declines.

One of the stories which gained wide circulation wherever stock market tickers clicked yesterday was that Jesse L. Livermore, formerly one of the country's biggest speculators, is the leader of the bear clique that has been hammering away at the market for weeks, and that the particular weakness which developed in high-priced and pivotal stocks was to be attributed, in part at least, to his activities. Arthur W.

Cutten of Chicago, the recognized leader of the bull party, watched the ticker from his hotel in Atlantic City yesterday and told close friends that nothing had developed to change his opinion about the market—that good stocks would eventually sell higher.

On Monday the 21st, to quote the *Herald Tribune's* report, the volume of trading exceeded six million shares, the largest since March 26th. Selling was indiscriminate and buying selective. Stocks were thrown overboard right and left in response to the huge volume of margin calls which had gone out over the week-end; but strong buying support was accorded by bankers and investment trusts to the better class stocks, and the bond market kept firm. Undaunted by this continued liquidation, Professor Irving Fisher, discussing the outlook in New York on October 21st, repeated his expressions of confidence and optimism. "I believe," he said, "the breaks of the last few days have driven stocks down to hard rock." He predicted a ragged market for a few weeks, to be followed by a mild bull movement. A brisk rally on Tuesday, October 22nd, though opening prices were not maintained, was attributed to "Charlie" Mitchell's cheerful description of the five weeks' crash in prices as a healthy reaction, and to Professor Irving Fisher's light-hearted reference to afflicted gamblers when he described the fall in stocks as "the shaking out of the lunatic fringe." Commenting on these two utterances, *The New York Times* rather laughed at oracles who were so sure of the

22 WALL STREET AND LOMBARD STREET

situation, seeing that, measured by averages and calculated on a percentage basis, "the decline in stocks between September 19 and October 21 was the most sweeping that has occurred since March, 1926, when excited speculation was stopped for nearly a year by the shock of re-adjustment."¹

"Charlie" Mitchell's return home, with his expression of confidence and an intimation that he was about to discuss a reduction in the rediscount rate, no doubt helped to produce the rally of October 22nd; but the respite was only for one day. On Wednesday, the 23rd of October, the stock market crumbled rapidly and collapsed in the final hour of trading "under the heaviest outburst of hysterical liquidation that Wall Street has experienced in many years." Opening prices were moderately firm; but liquidation gathered force as the session progressed, breaking down margins which had seemed adequate and bringing a deluge of selling orders "at the market" from every nook and cranny of the country. At noon the ticker fell hopelessly behindhand, and brokers had to rely on direct telephone reports from the Stock Exchange and on stock quotations printed at intervals on the bond tape. The final rush of frenzied trading overwhelmed floor brokers, and the scene was likened to Bedlam. On the Curb Exchange there was equally wild excitement, and the losses were equally heavy. Many leading issues lost from five to twenty points and declines in some of the in-

¹ See *N. Y. Times*, October 23, 1929.

active stocks ranged from 40 to 96 points on the day. It was estimated that the loss in market value of stocks listed on the New York Stock Exchange ran to about four thousand million dollars. It was the most sweeping decline, so far, of any day in the year. Moreover, it became known that an avalanche of margin calls went out that night from Wall Street, which meant that a good deal of the stock affected would have to be disposed of next morning. It was the third wave of selling, wrote *The New York Times*. "The first call was well answered; the second not so well. Few brokers expected a good response from their third call." Indeed, during the day quick calls for margins, sent by wire and telephone to unlucky gamblers all over the United States, brought but poor response. The public had lost heart and were unable or unwilling to put up more money or securities. The panic had begun, and the question was being asked whether anything would or could be done to stop the débâcle.

On October 24th, Thursday, strong banking support thrown into the stock market, after a conference of leading bankers at J. P. Morgan & Co.'s office, stopped another tremendous wave of liquidation which, in the first few hours of trading, had reduced the New York Stock Exchange to what the *Wall Street Journal* described as "probably the most demoralised condition" in its history. The panic extended to over-the-counter dealings, and Mr. Mitchell's bullish activities were reflected by falls

of 300 points in the shares of the First National Bank of New York and the United States Trust. Almost every market record was broken on this day of wild trading. Sales on the Exchange numbered 12,894,650 shares, passing the previous record (March 26, 1929) by four million shares. The Curb market also established a record with 6,337,415 shares. A turnover of more than 24 million dollars in the bond market was the heaviest since December 4, 1924. The tickers were later than they had ever been before.

This day's smash was accurately described by the well-known historian of American financial crises, Mr. A. D. Noyes, as "the widest break in the history of the stock market since the War, and one of the most costly to stock-holders of all periods." The violent wave of selling beat with almost equal fury on the Stock Exchange, the Curb market and on over-the-counter transactions. Sentiment was not improved by publication of the earnings of the General Motors Corporation for the nine months ending September 30th, which were 222 million dollars against 240 million dollars in the corresponding period of 1928. It was already known, of course, that the boom on the stock markets had not been accompanied by anything like a corresponding upward movement in the trade of the country during the year. Talk of record-breaking earnings in many industries was, however, still used by leaders of the disappearing bull contingent to rally their dispirited

followers. The saddest feature of all was the ruin that overtook little speculators all over the country. Many thousands of them, it was reported, "threw their holdings into the whirling stock exchange pit for what they would bring." No wonder that the ticker services maintained by the New York Stock Exchange and the New York Curb Exchange proved utterly inadequate. At one o'clock that day both tickers were 92 minutes late, and the task of printing the market was not completed by the Stock Exchange tickers till after seven o'clock. Wild and false rumours spreading from Wall Street all over the country included reports that the Chicago and Buffalo Exchanges had been closed. Meanwhile the Federal Reserve statement on October 22nd showed the strength of the central banking situation. The New York Reserve Bank maintained its rediscount rate at 6 per cent, though time-money rates dropped over one per cent during the day to a quotation of from 6 to 7 per cent, which was the lowest of the year. Bankers' bill rates also "softened" (to use the parlance of the market) and call money fell from 6 to 5 per cent during this first day of panic.

It should be added that prices on Thursday, October 24th, did not close at the worst of the day; for a rally took place in the afternoon when Mr. T. W. Lamont, after a conference with bankers in the Morgan offices, told financial news reporters that the situation was sound and that many stocks had fallen too low. In one important respect undoubtedly the

situation was technically sounder than in previous panics and financial crises. The leading Wall Street brokers had taken precautions in good time, some months before the crash, by exacting from most of their clients fifty per cent margins in place of the 25 per cent which had previously been thought safe and sufficient—evidence, as a financial editor put it, that “however far experienced Wall Street may have been swept from its mental moorings by the market’s seemingly boundless capacity to rise, its business instinct had warned it of what the end would be.” The falls were so precipitate that many Stock Exchange firms would have been ruined if the margins of their speculative clients had been no larger or wider than in ordinary times. While the security of big banks was supported by the Federal Reserve System, the safety of the Stock Exchange firms was also an important factor in fortifying credit.

Another feature of the crisis which impressed observers on that fateful day was that it all resulted from compulsory liquidation due to exhausted margins and to a general fright, which seized the gambling multitude all over the United States at the sight of values crumbling from hour to hour in Wall Street. Bear selling there was, no doubt, by intelligent professionals; but it cut no figure at all in the day’s reckoning. Another noticeable contrast with many previous crises on the Stock Exchange was that dear money played no part. Indeed, as we have seen, rates went rather lower, and Thursday’s brokers’

loan report showed a reduction on the previous week of 167 million dollars. This was the largest reduction of any week since December, 1928, though the total still stood within 170 million dollars of the highest recorded figure. An interesting incident in the commodity markets was a decline of 11 cents a bushel in wheat, which fell to just over a dollar for December delivery.

This Black Thursday panic—so a writer in the *World* observed on the following day—marked the eleventh day of panic proportions since the famous Black Friday of 1869, and was “the first major financial collapse to occur without corresponding industrial or commercial failures, and in the face of apparent general prosperity and sound fundamental conditions.” In fact, to continue the quotation, “it seems to have been a gambler’s and not an investor’s panic, and only in the fall of prices was it comparable to other days.”

Another writer in the *World* of October 25th, Laurence Stern, put it picturesquely and dramatically, if not melodramatically: “In a society built largely on confidence, with real wealth expressed more or less inaccurately by pieces of paper, the entire fabric of economic stability threatened to come toppling down. Into the frantic hands of a thousand brokers on the floor of the New York Stock Exchange poured the selling orders of the world.”

One comic incident in the efforts of big business and big bankers to bolster up prices was the appear-

ance in the afternoon of Mr. Richard Whitney, a Morgan broker, who walked to the post at which United States Steel is traded and shouted "205 for 25,000 steel." A moment before Steel common had stood at 190 bid. Another favourite gambling counter, American Can, dropped from 156 to 131. It then rose to 140, and from that figure returned in one bound to 163. In fact, the afternoon recovery was sharper, though much less extensive, than the preceding decline. The ebbing courage of Wall Street returned, and the bear contingent began to cover their short contracts as a measure of precaution.

At Washington the administration was watching these events with natural anxiety. On the night of the 24th, Treasury officials sent forth a message announcing that underlying business security remained practically unshaken, and one of the Government's economic experts spoke of the collapse as "the very salutary and inevitable deflation of a highly unhealthy situation." Senator Carter Glass, former Democratic Secretary of the Treasury, blamed "Mitchellism" and "improper administration of the Federal Reserve system" for Wall Street's débâcle, while telegrams from London in the *New York Evening Post* of October 25th cited Sir Josiah Stamp and Mr. Maynard Keynes for the view that the New York slump would benefit the world. As Mr. Keynes put it, credit would be freed for industry, and incidentally "commodity prices will recover and farmers will find themselves in better shape. . . .

The relative yield of stocks and loans [in Wall Street] was an impossibility as a permanency. I consider this to be the root cause of the crash." Mr. Keynes added:

I may be a bad prophet, speaking in this way, but I am sure I am reflecting the first instinctive reaction of English financial opinion to to-day's situation. We don't expect any serious direct consequences from the Wall Street slump except to a limited number of Anglo-American securities which are actively dealt in both here and in New York. On the other hand, we find the longer look-ahead decidedly encouraging. We hope American investors will keep their heads cool. This means two things: first, that they will not put stocks back to dizzy heights as soon as pressure is removed; secondly, that they will appreciate that what is happening is a bull point for world prosperity and will serve in the long run to strengthen the position of sound shares.

Mr. Keynes did not foresee that the crash, instead of proving a bull point, would be followed by a disastrous slump in the world's trade. He did see that stocks could not continue standing "at a level where their yield was one-third of the interest speculators had to pay to carry the stocks."

Sir Josiah Stamp looked upon the New York break as rather overdue, but thought it would be valuable for the financial health of the United States and still more valuable for the rest of the world. The state of affairs in New York for the last twelve months had been a menace to financial stability everywhere, and had upset the working of the international gold

standard. With these artificial conditions removed by the collapse of the Wall Street boom, money would flow to the right quarters once more. He did not think the raising of the bank rate by the Bank of England, which was "solely in self-defence" would alone have brought about the break, though it made it easier for it to happen. "Nor do I believe the Hatry crash had anything to do with the New York situation."

On the same afternoon, October 25th, President Hoover, replying to questions by newspaper men as to the effect of the stock market collapse on national prosperity, gave out a reassuring statement.

The fundamental business of the country—that is, the production and distribution of commodities—is on a sound and prosperous basis. The best evidence is that although production and consumption are at high levels, the average prices of commodities as a whole have not increased and there have been no appreciable increases in the stocks of manufactured goods. Moreover, there has been a tendency of wages to increase and the output per worker in many industries again shows an increase, all of which indicates a healthy condition.

The construction and building material industries have been to some extent affected by the high interest rates induced by stock speculation and there has been some seasonal decrease in one or two other industries, but these movements are of secondary character when considered in the whole situation.

A temporary drop in grain prices sympathetically with Stock Exchange prices usually happens, but, as the Department of Agriculture points out, the overriding fact in grain is that this year's world wheat harvest is estimated to be

500,000,000 bushels less than that of a year ago, which will result in a very low carryover at the end of the harvest year.¹

This statement, aided by hopes of a speedy cut in the rediscount rate, had a steadying effect. The volume of sales dropped to less than half that of the previous day; trading was orderly and, though the market was fitful and nervous, prices of the leading securities were remarkably stable. The Federal Reserve Board's monthly summary of general business supported the President's message; for it estimated industrial production in the third quarter of 1929 as 10 per cent above the record for the corresponding period of 1928. Nevertheless, it admitted a sharp decrease in the output of automobiles and tires, a further reduction in steel plant operations and a further decline in building contracts. It was believed that banking interests and investment trusts and bargain-seekers were buying "key-stocks" like U. S. Steel, General Motors, General Electric, Westinghouse and Anaconda Copper. Most of the stock averages showed a small gain on the day. Mr. Babson, the formidable forecaster who had prophesied that the skyscraper of speculation was about to topple to the ground, asserted that prices would eventually go still lower, but agreed that a period of stabilization had arrived for the present.

But the present was not for long. On Monday, October 28th, to quote the *Herald Tribune*, the stock market, struck by renewed scare selling, forced

¹ This estimate proved wrong.

liquidation and bearish operations, "capped last Thursday's climax by scoring the greatest decline on record, completing the erasure of approximately all gains made this year. Leading issues were carried down to new low levels. Losses for the day on the Stock and Curb exchanges ran from 8 to 14 thousand million dollars."¹ Total sales were 9,212,800, the second largest on record. Investment trust stocks fell heavily in the over-the-counter market, and high-priced bank stocks dropped from 100 to 500 points.

On this day two hopes were disappointed. The first was that any further collapse would be prevented by a cohort of investment trusts which (upon this theory) were waiting for a decline to buy stocks on a large scale. Great numbers of investment trusts and finance companies had been formed during the past year, and their directors were supposed to be experts in the art of investment, who would buy carefully selected stocks at low prices with an eye to their earning power and future appreciation. Now that stocks had fallen so low, these organizations would stem foolish liquidation by employing their purchasing power and so hold up a falling market. What most people overlooked, to quote one of the New York financial editors, Mr. Paul Willard Garrett, was that the portfolios of investment trusts are subject to the same elements that govern an individual's speculative program. "Just as many shrewd individual investors were caught unawares by last Thurs-

¹ *Herald Tribune*, October 29, 1929.

day's sweeping slump, so some so-called investment trusts were caught unawares." Perhaps "most" should be substituted for "some." Probably the majority had bought stock at high prices, thinking they would go higher and had failed to sell in July, August or September, when they ought to have been liquidating and putting out their funds in the short loan market. It would seem that only a few well-managed trusts came at all creditably out of the crisis.

Another disappointment was the lack of substantial and effective banking support. There was only one rally during the session of Monday, October 28th. That happened when it was learned early in the afternoon that leading bankers were again conferring at the offices of J. P. Morgan & Co., and that their brokers would soon step in to bolster up the list. But it quickly became evident that banking support was not being afforded, and that the banking pool had no intention of trying to check the decline of existing price levels. This disappointment contributed to a psychological rout in the last hour of the session. The rally lasted about 15 minutes. Closing prices were almost the lowest of the day. On all sides Wall Street asked gloomily: "Where is the banking pool?" For the first time for a fortnight the bond market was under pressure, indicating that the situation in common stocks had reached a point where sound investments had to be sacrificed for the purpose of holding on to speculative commitments. In response

to the general wailing and groaning of their unlucky clients and customers, who were now bankrupt or on the verge of bankruptcy, bankers and brokerage houses now joined in a compassionate movement to lower margin requirements from 50 to 25 per cent of market valuation. This was only reasonable in view of the deflation in spot prices; for many gambling counters had been halved in value during the last week. Of one thing and one only, so wrote the *New York Evening Post*, Wall Street was quite certain—namely that the forthcoming statement of brokers' loans would reveal "the most terrific contraction ever witnessed in the total of such borrowings."

Another feature of this disastrous day may be noted from *The New York Times* of October 29th. "In contrast even to Thursday's confused and hysterical market, stocks of the highest value and the soundest rating were the heaviest sufferers yesterday." Shares like General Electric, U. S. Steel, American Telephone and Western Union, which had resisted Thursday's collapse, led Monday's list in volume of liquidation and in scope of losses. Evidently the professional pools had surrendered, and men remarked that the decline had now run past the margin trader into the holdings of the average investor.

Those who feared that a general slump in commodity markets might follow the collapse in Wall Street found a presage of coming disaster for agri-

cultural communities in the telegram of October 28th from Sao Paulo, which announced that the State Government had ordered the Santos Coffee Bolsa to close its doors and suspend operations indefinitely. A heavy fall in coffee had broken down the valorization plan. The long-sustained attempt to keep up an artificial price for coffee had succeeded so well that other coffee growing countries had gradually increased their production and the world's demand was unable to keep up with the world's supply. It was the case of the rubber restriction scheme over again; and growers of grain, cotton, hemp and jute soon found themselves in a similar plight. The closing of the Santos Bolsa followed hard upon the closing of the Rio di Janeiro Coffee Exchange, where (according to the *Diario de Noite*) absolute panic led important coffee interests to appeal to the President of Brazil, who thereupon closed the Exchange in the hope that before long valorization might be restored by another loan from London, which, indeed, happened a few months later.

CHAPTER III

NOVEMBER, 1929

WALL STREET started November in a much more cheerful, not to say confident, mood than anyone could have anticipated earlier in the week. All stock exchanges are sensitive, especially to bullish influences, because "hope springs eternal in the human breast"; and of all speculative markets in the world those of New York fall most easily under the sway of speculative psychology. Gasping and half stunned by two irresistible waves of selling, professional dealers recovered their breath and took fresh courage on Wednesday and Thursday, the last two days of October, when a smaller wave of public buying, driven along by the combined energies of Government and Big Business, caused a sharp rise of stock prices.

A table published by the *World* on the morning of Friday, November 1st, gave "the high prices of the year for fifteen leading stocks, the low, the closing prices last night, and the recovery in dollars per share from the low points."

	1929 High	1929 Low	Recovery in	
			Close Oct. 31	Dollars Per Share
American Can	184 $\frac{3}{4}$	107 $\frac{3}{4}$	135 $\frac{3}{4}$	28
American Tel. and Tel....	310 $\frac{1}{4}$	193 $\frac{1}{4}$	246 $\frac{3}{4}$	53 $\frac{1}{2}$
American Tobacco	232 $\frac{1}{2}$	160	209 $\frac{3}{4}$	49 $\frac{3}{4}$
Anaconda Copper . . .	174 $\frac{7}{8}$	75 $\frac{1}{2}$	100	24 $\frac{1}{2}$
Baltimore and Ohio . . .	145 $\frac{1}{8}$	112	125 $\frac{1}{4}$	13 $\frac{1}{4}$
Bethlehem Steel	140 $\frac{3}{4}$	80	97	17
Consolidated Gas	183 $\frac{1}{4}$	88 $\frac{7}{8}$	110	21 $\frac{7}{8}$
General Electric	403	210	252	42
General Motors	91 $\frac{3}{4}$	33 $\frac{3}{8}$	48	14 $\frac{7}{8}$
New York Central	256 $\frac{1}{2}$	175 $\frac{3}{8}$	204	28 $\frac{3}{8}$
Radio	114 $\frac{3}{4}$	26	50	24
Reading	147 $\frac{3}{4}$	101 $\frac{1}{8}$	123 $\frac{1}{4}$	22 $\frac{1}{8}$
Standard Oil (New Jersey)	83	48	70 $\frac{1}{4}$	22 $\frac{1}{4}$
United States Steel	261 $\frac{3}{4}$	157 $\frac{3}{8}$	193 $\frac{1}{4}$	36 $\frac{1}{8}$
Westinghouse	292 $\frac{5}{8}$	105	160 $\frac{1}{4}$	55 $\frac{1}{4}$

A record-breaking decline of over a thousand million dollars in brokers' loans, which far exceeded expectations, brought the total down to 5,538,000,000. Along with this announcement came the cheerful tidings that the Bank of England had reduced its rate of discount from 6 $\frac{1}{2}$ to 6 per cent. This was followed by a reduction in the rediscount rate of the Federal Reserve Bank of New York from 6 to 5 per cent, the Reichsbank also reduced its rate from 7 $\frac{1}{2}$ to 7 per cent. Most of the City Editors hailed "returning confidence" with what unfortunately proved to be premature enthusiasm. Wall Street, so one of them wrote, "began to revise its estimate of the recuperative powers of the country, amazed at the flow of hidden national wealth that bargain stock prices have brought." Naturally

enough a bull point was found in the absence of insolvency among Stock Exchange firms and banks "for the first time in a major panic." The rush to buy was stimulated by a statement of John D. Rockefeller, published on Wednesday afternoon, that the destruction of security values was unjustified, and that he and his son were buying substantial amounts of stock. Here and there salutary cautions were intermingled with good news and optimistic views. Readers of *The New York Times*, for instance, were reminded how invariably Stock Exchange men forget, when struggling on to their feet after panic liquidation, "that every such financial crisis leaves in the hands of bankers or fellow-brokers great masses of stock taken over to relieve or save the larger victims of the crash." This was the price Wall Street had to pay for its exemption from open bankruptcy and from a dangerous run on the banks by frightened depositors. To continue the quotation from this experienced writer: "Stock held on such a basis is invariably sold again as soon as the market is in shape to take it; which explains, at least in part, why recovery in prices at such junctures is spasmodic, uncertain and always checked when it seems to be striking the old pace again."

Trading on Thursday, October 31st, had been confined to three hours, from 12 to 3 o'clock, and in the last hour the markets were subjected to selling pressure. Probably the authorities felt that the public needed a rest; for they ordered the closing down

of the Stock Exchange on Friday and Saturday, the first two days of November, in order that the professional staff might overtake arrears of work, and in the hope that normal market conditions would prevail on the following Monday.

On the night of October the 31st the Ford Motor Company, in announcing a reduction of its car and truck prices, had declared "our belief that basically the industry and business of the country are sound. Every indication is that general conditions will remain prosperous." The issue of some good dividends seemed to confirm the views of those who held that financial reconstruction and the advent of cheaper money would maintain trade prosperity. An editorial in *The New York Times* of November 1st stated as a "plainly recognized" fact "that a wild and abnormal chapter in financial history has been definitely closed and a new chapter of financial sanity opened." But on the next day, the *Commercial & Financial Chronicle* of New York began its review of the situation with a commentary which was to be fully confirmed by the events of the next twelve months in all parts of the civilized world:

The present week has witnessed the greatest stock market collapse of all the ages, and it has left behind a trail of sorrow, misery and distress, with money losses of such magnitude and of such widespread nature that there can be no question of its being without a parallel in Stock Exchange history. No such complete undermining of the stock market structure can be said ever to have occurred before, and the

statement remains true notwithstanding that the rebound which followed on Wednesday and Thursday has been almost as complete as the antecedent collapse.

In the same article, the *Financial Chronicle* argued that the enormous reduction in brokers' loans "simply means that thousands and tens of thousands of owners of stocks have been unceremoniously sold out." It also pointed out that the loans made by reporting member banks in New York City on their own account had actually *increased* by nearly a thousand million dollars, from 1,077 million dollars on October 23rd to 2,069 million dollars on October 30th, while the loans for account of others, representing funds loaned out by the banks to larger depositors, corporate and individual (against which no reserves are maintained), had fallen during the week by a still greater sum—from 3,823 million dollars to 2,443 million dollars. Thus, it appeared, the reporting member banks of New York City were obliged to save the situation resulting from the calling-in of over 2,000 million dollars in loans by taking over a portion of these loans themselves, to prevent the stock markets from going utterly to pieces. The *Financial Chronicle* concluded that "the calling of \$2,087,000,000 of outside loans caused the state of demoralization which eventuated in the panic in the stock market." It suggested that the investment trusts were among the chief culprits, and raised the question whether the practice of making outside

loans ought any longer to be tolerated. It also asked, in view of the last fortnight's experience, "what becomes of the claim that stock exchange securities constitute the most liquid collateral in the whole wide world?" thus supporting Mr. Paul Warburg's argument in favour of discounts as the best basis and security of a sound credit system.

Among the shares which had fluctuated most wildly were those of the Radio Broadcasting services, as they had been very largely used during the excitement of the bull movement in conveying financial news and security quotations to American homes in all parts of the United States. Before the bear movement set in, it was estimated that 15 million individuals in the United States were directly interested in the stock markets, and the radio services had enabled the loneliest farmer to take part in what had proved in so many cases a ruinous gamble. These services were no longer required when the speculators had lost their money and consequently their interest in share quotations.

An article in the *Herald Tribune* by Professor Irving Fisher on Sunday, November 3rd, found in the recovery of prices confirmation of his theory that unexampled prosperity had justified the boom and that a foolish panic was responsible for the October crisis. "Thousands of weakly-margined accounts had been cleaned up, and stocks at the lower prices had passed into stronger hands." The long bull market could not in his view be explained by the simple

formula, "it went up because it went up"; but (rather illogically perhaps) he attributed the recent collapse to mob psychology and adopted the formula that "it went down because it went down." As he saw no disturbance in the nation's high-record prosperity, Professor Fisher refused to allow a comparison of the Stock Exchange boom with the Florida boom in land values, which had been pricked like a bubble. Even now, after the rebound, he held that prices were still "absurdly low," and that, with the resumption of trading, the stock markets would regain their equilibrium.

Monday (November 4th) proved disappointing. Trading was not excited, but buying orders were submerged under waves of selling, and many shares declined from 10 to 20 points. Professional opinion attributed pressure of sales to the marketing of stocks, which had been taken over by larger interests to help out speculators and to prevent demoralization. The theory that cheap bargains were about found critics. It was calculated that even the lowest prices of the previous week averaged about 1 per cent above the closing levels of 1927, while the average was now 19 per cent higher than at the end of 1927 and 56 per cent higher than at the end of 1926. Moreover, official assurances that general business was sound were being questioned. From various parts of the country came reports that orders for motor cars, radio sets and other articles of luxury were being cancelled. It stood to reason that the

· ruin of so many thousands of speculators—to say nothing of many more who had been stripped of surplus funds by the failure of their adventures in the stock market—must affect the nation's purchasing power. On the other hand, the commodity price inflation which aggravated the post-war crisis of 1920 was conspicuously absent. There were no "frozen credits" outside the security markets. True there were some weak spots in agriculture and industry; but there was no reason, so men argued, why the stock market crash should bring a major industrial depression in its wake. Had not the Stock Exchange long ago, when the bull market carried shares far above their intrinsic value, lost its function as an index of business conditions?

On Wednesday, November 6th, the Stock Exchange closed at one o'clock after a short three hours' session, with prices crumbling under a violent flood of renewed liquidation. Several favourite counters sold down to new low levels for the year, and nearly six million shares changed hands at swiftly declining prices. Many brokers, taking alarm, selected those accounts which had been impaired and were held on inadequate margins and then, where overnight warnings failed to bring any additional funds, proceeded to dump stocks on a falling market. In Wall Street this liquidation of impaired margin accounts was considered the main factor. Experienced operators declared that bear markets had come to stay for a time, and that the destiny of the Stock Exchange

must now depend upon business developments and industrial earnings in 1930.

But next day (Thursday, November 7th) after another opening break, stocks rose from 3 to 34 points. Brokers' loans showed another enormous drop this week, bringing the total down to \$4,882,000,000. It was generally believed that the rally in prices towards the end of the day was due to organized support by banking interests, as well as to investment buying, stimulated by the low levels of stocks. A leading article in the *World* of November 8th pointed out that "the old standards for gauging security values have again come into use. Buyers once more are giving attention to the yields of stocks." Shares were no longer being purchased on a tip that "they say they are going up." The same writer went on to say: "Should there be a return of the panicky conditions which prevailed in Wall Street for a brief period in October, it is conceivable that trade and industry could be upset by the undermining of confidence which might follow. No one knows whether the market has yet 'made its bottom.' After its steady climb of the past four years the decline might conceivably go further before prices correspond with intrinsic values." The events of many succeeding months were to justify the cautious and somewhat pessimistic outlook of this article.

For the next few days, trading was more or less normal, with prices generally at slightly lower levels; but late on November 11th a renewed outburst of

liquidation struck the stock market. Leading issues, such as United States Steel, closed at prices ranging from 10 to 22 points lower on the day, and as a whole the market relapsed to the low level of October 29th. Practically no resistance was offered, and Wall Street's only explanation was that "persons who usually buy large amounts of stocks on such reactions seem temporarily to have lost confidence," and were letting the market flounder through until it reached a point at which it could stabilize itself without artificial aid.

The following day, November 12th, saw a further decline. On that day, in an active session, the sales on the New York Stock Exchange numbered 6,452,770, bringing the total for the year to over a billion¹ for the first time in its history. The chief interest revolved round the United States Steel post, where a battle between bulls and bears raged throughout the session. The *Herald Tribune* thus described the day's fluctuations:

Steel opened at 158½, off one point. Determined buying slowly pushed the price up to 160, while the rest of the list sagged. The price held for a while around 160, then was suddenly smashed down below 158. Shortly before noon an aggressive buying movement carried the price over 163, with the rally spreading to the rest of the list.

There was a lull, and for a moment it seemed that the rally would gain momentum. Abruptly, however, Steel dropped, causing an uproar on the floor of the Exchange. The

¹ One thousand millions.

stock touched a new low for the year at $152\frac{3}{4}$ and closed at $153\frac{1}{2}$. The previous low price for the year was $157\frac{1}{8}$.

For the time being it looked as if the financial community had lost its head, and that many stocks were being thrown on the market by overtimid speculators who had been dismayed by the course of prices since the panic week. The question continually asked in Wall Street at this time, how much further prices could fall, was answered by one authority with a cheerful metaphor: "The centre of gravity has been lowered and, in consequence, resistance to further depression is strengthened. . . . The drop has been like lowering a weight from the top of a ship's mast into the hold. The stability of the market and the ship is increased many times."

But this stability was for the present conspicuous by its absence. In the precipitous decline, real values and earning powers were as little regarded as they had been in the last stages of the bull movement.

Selling went on relentlessly the whole of Wednesday (November 13th), and the only bright spot in a gloomy session was the news that a broker, acting for John D. Rockefeller, had made a firm bid for a million shares of Standard Oil of New Jersey at \$50 a share, in the hope of preventing a further fall. On the same day, the Committee on Business Conduct of the New York Stock Exchange took steps to discourage short selling. Members of the Stock Exchange were directed to furnish daily "a list of all stocks

borrowed, and from whom and for whose account; a list of all stock loaned and to whom; intra-office borrowings and for whose account; a list of all stock which you have failed to deliver and for whose account."

An optimistic attitude was still maintained by the Administration at Washington, and income tax reductions were promised forthwith in order to strengthen confidence and encourage business. But the Government quite rightly was unwilling to do anything that might revive Stock Exchange speculation. Apparently, wrote Mr. Laurence Stern in the *World* of November 14th, the Washington view is that the country is paying a normal penalty for the excessive speculation of the last two years, that the movement must run its course, and that there is virtually nothing that the Federal Reserve system can do since it has no legal power to lend on collateral. But the Reserve system, he argued, could, by increased purchases of government bonds and acceptances, and by increased rediscounting of commercial paper, considerably augment the credit facilities of the member banks, and the credit so created might well be employed to relieve the situation with regard to pledged stocks.

Thursday, November 14th, witnessed a sharp rally, in which stocks regained two days' losses. A measure of confidence was restored by two cheering factors—a reduction of the rediscount rate of the Federal Reserve Bank from 5 to 4½ per cent, and a

shrinkage of 710 million dollars in the total of brokers' loans during the week, making the record reduction of 2,462 million dollars in three weeks. At the same time wheat and cotton prices moved higher.

The rally was maintained on Friday (November 15th) when call money fell from 6 to $5\frac{1}{2}$ per cent. Following the Rockefeller bid for Standard Oil shares, an order was placed in the market for 200,000 United States Steel shares. At the same time, President Hoover announced plans for a national conference, representative of industry, farming, labour and politics, to consider ways and means of speeding up business revival, by stimulating public works construction, railroads and shipbuilding. The President's action was timely, but it exposed the Administration to criticism; for why, it was asked, should it be necessary to call such a conference and to outline such a plan if business conditions were in reality, as had been repeatedly asserted during the past few weeks, fundamentally sound and prosperous? Official returns, however, published on November 16th were satisfactory; for they revealed that October exports had increased heavily and were the largest of any month in 1929, though they showed a decline on those of a year earlier of \$20,800,000. Imports had also risen, and the net amount of gold coming into the United States during October was estimated at \$17,516,000. Wholesale prices were found to have declined $1\frac{1}{2}$ per cent compared with

October, 1928, and $1\frac{1}{4}$ per cent compared with September, 1929

On November 16, 1929, I wrote home from New York:

"Until yesterday, November has brought no consolation to Wall Street and its speculative clients for the disasters of the last half of October. But yesterday there was a distinct and substantial rally on the news from Washington that the Treasury, with the agreement of all parties in Congress, intended to hasten a measure for reducing the income tax and so stimulating business. The income tax is already very light, according to European standards; but the Republican Administration is pledged to high protection and therefore cannot do anything either to relieve the consumer or assist foreign trade by a reduction of customs duties. At any rate, Wall Street was pleased to hear of a reduction in taxes, and at the same time was cheered by the announcement that the New York rediscount rate was likely to be reduced (as it was) to $4\frac{1}{2}$ per cent.

I have asked a good many experts whether they think it possible that the bull market of last year might begin again. Some think that the public would again scramble for stocks, if there were a change of psychology. Others, however, argue that most of the small speculators all over the United States—the men and women who buy stocks on margins—have been ruined, or at least too severely hit, to be able to start again. With the exception of yesterday's

rally the markets in the last two weeks have been disappointing. Whenever a rally occurred, it seemed to invite an overwhelming flood of liquidation. This depressed and depressing state of the stock markets is explained by the magnitude of the convulsion, which far exceeds anything that has ever occurred in the United States or anywhere else. Conditions were so serious and so many large and important interests were threatened that the great bankers and financiers had to come to the assistance of the smaller interests. Many stock accounts were taken over, and the collateral behind them will have to be disposed of gradually. This is being done, and this explains why, so far, every rally has been followed by a collapse. In many cases the value of the collateral has been much reduced owing to the great decline in prices. Hence the utmost caution and discretion are necessary to prevent the lenders themselves from becoming involved in losses which might lead to their own ruin." Consequently, the collateral had to be "fed out" to the market by degrees, as circumstances and conditions allowed. In the words of a first-rate Wall Street authority, "The present collapse is of vastly greater dimensions than any preceding one, and the task of nursing the army of stock market cripples, which the wreck has left behind, is correspondingly more difficult and may require a greater amount of time than has been needed in the past in dealing with lesser catastrophes."

Trading on Monday, the 18th, was irregular; but

little effect was produced by the announcement of the first Stock Exchange failure consequent on the collapse. Government bonds were now coming into demand as a substitute for the call loans, in which corporations and investment trusts had been finding employment for their surplus funds, and the movement soon spread to municipal stocks. With the return of trading to normal, or subnormal, stockholders began to demand information about corporate structure, local conditions, earnings, and other factors bearing on the intrinsic values of stocks which had been almost entirely subordinated during the boom to considerations of prospective mergers, split-ups and other events likely to affect prices.

November 19th saw a rally in stocks ranging from 2 to 14 points. The market was encouraged by a reduction in call-money rates to 5 per cent, with outside funds available at 3 per cent, and by a sharp recovery in the prices of agricultural products. Towards the end of the day the recovery was so pronounced that it seemed to indicate short covering rather than investment buying, and professional Wall Street was inclined to regard it with suspicion. "Reconstruction" was perhaps the term most applicable to the market at this stage, when men had ceased to cower under the falling ruins and were looking about to see what was yet standing, uncertain whether it too would totter and crumble away or whether it would serve as a firm foundation for rebuilding.

Meanwhile, President Hoover was conferring

with business men at Washington. Mr. Henry Ford, one of the representatives at the conference, took a line of his own and declared that "there is nothing to fear, and if everyone will attend to his work, the future is secure." The depression in business, he asserted, was quite unconnected with the stock market crash and had indeed preceded it. A report of November 20th, giving the figures for motor-car production, showed that, while for the first nine months of 1929 production had increased 38 per cent, in September it was very little above the figure for the same month in 1928, and in October it had fallen $4\frac{1}{2}$ per cent below. These statistics went some way to confirm Mr. Ford's point of view. On the other hand, granted that the industrial depression was antecedent to, or concurrent with the stock market slump, is it not probable that the subsidence of share values and the decline of business activity acted and reacted upon one another? Under such precarious and sensitive conditions, confidence among holders of industrial securities was easily sapped by adverse reports from leading corporations.

Another lowering of the London discount rate on November 21st from 6 to $5\frac{1}{2}$ per cent, followed by a cut in the Norwegian bank rate, helped to maintain the advance on the New York Stock Exchange until on November 23rd the averages stood 47.75 points for industrial and 20.27 for rails above the low levels touched on November 13th. At this point the buying movement seemed to be losing strength.

Nevertheless, the drop in brokers' loans indicated an improved technical position; for it showed a "liquidation of margin accounts into the hands of outright buyers." The rally pointed to a readjustment and a process of sorting out good stocks from bad by shrewd investors.

Next week (Monday, November 25th) opened with the usual Monday set-back. An accumulation of selling orders over the week-end led to lower opening prices all round, and traders for the decline did their best to extend the reaction by heavy short sales. The copper market was conspicuously weak all day; but other shares rallied later; and though prices were as a whole lower on the day, most of the active issues were only slightly affected. The following day saw further declines, and it was evident that whenever prices showed signs of recovery "support stock" bought by big interests during the crisis was dumped on the market. Short selling, too, had been on the increase since the Committee of the Stock Exchange discontinued its daily questionnaire, while the decision to close the exchanges from Thursday till the following Monday contributed to the *malaise*. A comment in *The New York Times* of November 27th provides a woeful analysis of the situation.

Possibly when a longer view can be taken of the present decline it will be classed as a secondary reaction, the inevitable consequence of the market's rapid rebound from its lows of November 13, when panicky liquidation drove stocks far below their reasonable value. There were three definite

classes of buying apparent at that time: first, the organized support of bankers anxious to terminate the liquidation; second, the picking up of bargains here and there by astute individuals who had not lost their heads; third, the rebuying of stocks sold for the decline. The situation after the brisk rallies which have followed now reverses itself. All three classes of buyers are prone to turn sellers—the bankers who desire to liquidate “support stock” because it has accomplished its purpose, the astute individuals because they have made a profitable turn, the short sellers because the market has rallied robustly, offering them a good jumping-off place at what might be termed a recovered level. Possibly the combination of these three classes of selling would not stop a normal market; but the present is an abnormal one. It has been deprived of its backbone through the withdrawal, by choice or necessity, of a tremendous percentage of the general public who formerly furnished a sustaining power with buying orders on every reaction.

President Hoover's measures to restore confidence and prosperity, though certainly not without practical value, had ceased to stimulate the stock market, which was disposed to await actual business developments. These could hardly be estimated until reports for the first quarter of 1930 were available. No one now expected anything but an unfavourable comparison with the earnings for 1929; but at the same time, as a financial editor pointed out (November 27th), “in its record-breaking decline the market had gone far towards making allowance for this fact.”

On Thursday, November 28th, being Thanksgiving Day, all exchanges were closed as usual; but the authorities had also decreed that they should remain

shut until Monday, making this the longest holiday the Stock Exchange had known since the beginning of the World War in 1914, when it closed for five months. It was also decided that trading was sufficiently restored to normal to justify a return to the five-hour day, instead of the curtailed sessions to which the market had been accustomed all through November. December, it was hoped, would see Wall Street restored to its normal conditions of activity and confidence; and if cheap money could revive speculation, there seemed every reason for optimism. Figures published on November 28th showed that the average rate for call money during the month had been only 5.38 per cent, the lowest rate since April, 1928. The figure compared with 6.35 for October, 8.53 for September and 9.52 for March, the highest for the year. The average rate for November, 1928, had been 6.75 per cent, contrasting with the low rate of 3.57 in November, 1927.

CHAPTER IV

DECEMBER, 1929

It would be tedious to continue in detail our account of the fluctuations on the New York Stock Exchange beyond the two panic months of October and November, whose startling events throw so much light upon the phenomena which it was our purpose to examine. At the beginning of December, I was convalescing at Atlantic City, a favourite resort of politicians, financiers and business men, between Thanksgiving Day and Christmas. There, as well as in New York and Washington, I had the good fortune to meet many friends and acquaintances whose views on the crisis, often divergent but always enlightening, helped me to form a more or less philosophic impression of the catastrophe whose ramifications were just beginning to extend in so many different directions. "The collapse," I wrote on December 5th, "has probably ruined more people and caused more loss than any previous crisis." President Hoover's message to Congress on December 3rd had, as the *Herald Tribune* observed, been very well received, and favourable repercussions had been felt on the speculative markets. The currency and banking sys-

tem had stood the strain well. "Fortunately," as the President put it, "the Federal Reserve System had taken measures to strengthen the position against the day when speculation would break, which, together with the strong position of the banks, has carried the whole credit system through the crisis without impairment." Undoubtedly an immediate collapse of credit had been prevented, though critics of Federal Reserve policy, especially in 1927, had also some justification for the statement that easy money was at least one source of the speculative debauch and of the subsequent headache, which was now causing so much anguish among disappointed gamblers, and was to inflict economic misery on millions of innocent victims all over the world.

To continue my impressions of December 5th. In contrast with the crisis of 1907, when the banks were unable to pay out legal money and Clearing House certificates had to be issued, I wrote:

This time, thanks to the monetary reform which established the Federal Reserve system, no banking troubles have supervened, and there has been no question about the continuation of the legal gold currency. Moreover, the crisis has hardly affected the commodity markets, though some declines in metals and raw materials followed the break in Wall Street; but the really distinguishing mark of the recent crisis has been the amazing prevalence among all classes and in all parts of the country of the gambling mania which produced it. This gambling mania spread gradually; for it is some three years since the upward movement in the stock market began, which by last August had lifted the common

stocks of many leading companies and public utility corporations to three or four times the figures at which they stood two or three years ago.

At first the upward movement was partly due to a well-grounded belief of careful and scientific investors in the value of the stocks. They felt sure that they were worth more than the prices at which they stood, and their confidence was justified in many cases by the increased earnings of the companies and corporations and by their enlarged dividends. But after a time, as more ignorant and unskilled investors joined in, the speculation lost all of its scientific character, and people bought merely because stocks were rising and almost every one took the view that they would go on rising. People in all ranks of life and in all professions began to make money and the whole country became a sort of glorified Monte Carlo. I feel sure that during the last year among the people who bought on margins, not more than one in ten had the remotest idea of the intrinsic value of the shares which they bought; and indeed, as every one knows, the yields of most of the common stocks, on the basis of last summer's prices, were ridiculously low. The lucky people were of course those who a few months ago, seeing that the prices of common stocks were unjustifiably high, sold out and bought bonds, which were comparatively cheap and have suffered very little during the slump.

I have discussed with a number of leading men in Wall Street, as well as with professors of economics, the probable future, and on the whole the impression I have gained is that for the present another outburst of speculation is unlikely.

Rich people who have not sold their stocks *feel* much poorer than a year ago. On paper they are perhaps only half as rich, though they own the same securities. Then again tens of thousands of people who speculated on margin have been totally ruined and tens of thousands more have lost a large part of their capital owing to sales, during or after the

panic, of stocks which they had bought for a rise earlier in the year.

The first result, therefore, has been a heavy decline in luxury buying of all sorts and also a large amount of selling of such things as motor cars and fur coats, which can now be bought secondhand at surprisingly low prices. The favored health resorts have suffered enormously. I am told that even here in Atlantic City, there were not half as many visitors during the Thanksgiving holidays this year as there were last year when the boom was in full swing.

Then again a very great number of servants, including butlers and chauffeurs, have been dismissed during the last few weeks, and the luxury trades generally are depressed. In most of the great cities the stores and big shops are finding that Christmas buying is on an unusually small scale.

This being the case, President Hoover has taken the initiative and has persuaded a large number of state governors and mayors to start a new programme of public works, or to enlarge the programme already under way. He has also summoned to Washington many of the big leaders of business from all parts of the country, and has induced some of the large corporations to increase their programmes of capital expenditure.

In addition to this he has persuaded Congress to facilitate a reduction in income tax, which will of course benefit all the wealthy classes, but will give no direct assistance to the poor as no income tax is paid by those who have less than \$4,000 a year. It is one of the curiosities of American public finance that a Republican government cannot make any remission of taxes to people of small or moderate incomes because the tariff which affects them is established for protective purposes and is supposed to be for the benefit of the whole country, though its incidence falls much more heavily upon the poor than upon the rich.

In spite of costly schemes for constructing or enlarging new

60 WALL STREET AND LOMBARD STREET

roads and canals and irrigation works it seems certain that there will be a great deal of deprivation this winter not only among those who have been impoverished by disastrous speculations but also among those who have lost their work owing to the decline in luxury expenditure. People engaged in luxury trades, including servants, will not be able to do work on the roads or to assist in the construction of public buildings. Still, President Hoover's efforts will do something to stem the tide of bad trade and unemployment.

During the upward swing that followed the President's message most stocks climbed to the best prices they had attained since the October collapse. One of Wall Street's oldest axioms is that the general public never buys freely unless quotations are advancing, and the truth of it seemed now to be again in evidence. More public buying, according to brokers—so wrote one of the City Editors on December 4th—had come into the market during the last few days of market gains than in the fortnight from November 15th to the end of that month. By Saturday, December 7th, newspapers were beginning to discuss the reappearance of a bull market. The *New York Evening Post* found compensation for the cost of the crash in security values in the reflection that "it made our people understand that they were ahead of the procession in the bets they had been placing upon the development of American prosperity . . . but on the other hand we don't want them permanently to stop betting on American prosperity. By and large, there is outstanding truth in the historic doctrine of John W. Gates père 'Never

bet against the United States.' ” The *Evening Post* believed that stocks would find their own level but refrained from prophesying what that level would be. As a well-known speculator once said, looking at the ticker with the white tape on one side and hieroglyphs on the other: “This side is mystery; that side is history.” Then the writer proceeded to a panegyric on speculation:

Carter Glass is trying to legislate against speculation. He ought to know better. Brookhart is thundering against it. He knows nothing at all about it. With all its sins, with the devastating indictment that can be brought against its recent excesses, speculation serves a vital economic purpose. It represents America's eager hope to find out, to discount, to play up and, finally, to evaluate the future. Without it our great railroads could never have been flung across the Western prairies. A live and ever-expanding nation like the United States must look to the future. England, which went through an identical period of expansion for a hundred years, now faces the deadly peril of living upon the past.

London, meanwhile, though relieved by the growing cheapness of money in New York, remained in a cautious mood. The *débris* of the Hatry crash had not yet been cleared away. Further liquidation was anticipated in New York; the Bank of France was hoarding gold, and high money rates in Germany were causing anxiety in Lombard Street. On the 12th of December, however, the Bank of England made a third reduction of its discount rate to 5 per cent, though the gold reserves were still below the so-

called Cunliffe minimum; but Wall Street instead of responding to this new bull point fell before a new wave of liquidation. Many active shares declined from 15 to 20 points. Reports were arriving that the country banks were reducing their loans on securities to customers whose margins had been impaired in October and November. It was obvious, as a well-known writer put it, that Stock Exchange anticipations of a new bull market had come from "forgetting everything that had happened since September." He added: "There has always been a week or so in the immediate sequel to our greater panics, when Wall Street indulged in that agreeable anticipation."

Markets on the New York Stock Exchange moved irregularly after this set-back until December 19th and 20th, when another sharp break occurred and many stocks plunged below the low points established in mid-November. "The Wall Street woods are full of bears," wrote a city journalist. Many of the declines on December 20th were attributed to "the hammering of weak spots by those who were selling for the fall." With the advent of the Christmas holidays, the tone of Wall Street improved; but the volume of business shrank to very small dimensions, and the most exciting year in Wall Street's history ended tamely in the main centre of speculation.

It remains to be added that in spite of the crash and the heavy losses of its customers all over the United States, Wall Street, from the standpoint of

the commissions earned by the Stock Exchange, the Curb Exchange and over-the-counter firms, had enjoyed a very prosperous year. The total turnover of stocks was greater in 1929 than in any previous period. For the first time in the history of the Stock Exchange, more than a thousand million shares were notified on the tickers, and high records were also established by the Curb and by all classes of security dealers. But for the time being all this activity was over and the volcano which produced it was extinct. The sequel must be considered in later chapters.

CHAPTER V

TWELVE MONTHS AFTERWARDS

LOOKING back from the serene temples and impartial heights of Lucretian philosophy,¹ an unconcerned American spectator—if any such there be—with no political axe to grind, no personal losses to deplore, no ruined friends to aid, no weak clients to support, between the middle of October and the end of November, 1930, would probably have passed some general reflection on the vanity of human wishes and the fallibility of human speculations. He would have agreed with the *Financial Chronicle* of October 18th, that “the industries of the country still remain in a state of great depression” and would have refused to predict “when the country is to emerge from this unfortunate situation,” though he might have added for the comfort of his compatriots: “the slump has continued so long that it seems hardly tenable to believe that the end is still far off.”

At this time, the connection between the collapse of Stock Exchange speculation and the collapse of commodity prices and the collapse of trade was no longer denied. In the words of the *Financial Chron-*

¹ *Edita doctrina sapientum templa serena*—Lucretius II, 8.

icle "the continued decline of the stock market is receiving considerable attention as having an intimate bearing upon the probable course of trade in the immediate future. No little uneasiness is being felt over the way in which stock prices keep plunging downward week after week." In some quarters there was a disposition to attribute this continued weakness to artificial rather than natural causes; i.e., to active efforts to depress the market by short selling rather than to genuine liquidation and unloading by banks or individuals who had held on desperately for twelve months and could hold on no longer. It was reported at this time that President Hoover was conferring with the New York Stock Exchange authorities to see whether anything could be done to check the operations of bears or to put them altogether out of business. The credit situation in many parts of the country gave ground for serious apprehension. False rumours and, still worse, true rumours might be circulated to make bear drives profitable at a time when confidence was disturbed and faith in the future of values entirely lacking. But our impartial philosopher would probably have agreed with the journal we have quoted that any drastic measures on these lines would be unlikely to relieve the selling pressure; for the stock market was now "inherently weak" owing to "the excesses which flourished and were tolerated for so long a period before the final collapse of last autumn." Short selling would have been ineffective and unprofitable, had not bona fide liquida-

tion been taking place on a very extensive scale by people who were either unable to hold on any longer, or had lost confidence in the future and were therefore parting with their securities. "In the last analysis, however, the chief trouble with the market is a complete absence of buying on any extensive scale. No one seems to be willing or able to take over stocks or, for that matter, bonds in large quantities."¹

In November, 1930, Stock Exchange conditions in New York went worse instead of better. Before the middle of that month the general level of quotations had fallen below the low records of October 22nd and November 13th (Black Wednesday), 1929, while brokers' loans declined to 2,235 million dollars, the lowest figure on record in the five years since the Reserve Board, in January, 1926, undertook to publish its figures weekly. On November 7th, the stock market index of the New York *Herald Tribune* fell to 138, "the bottommost point reached since November 2, 1927." According to the city article of that newspaper on November 8th, "the bulk of the pressure was directed against the much-battered rail shares, which fell 2.9 points," and thus, after twelve months' decline, liquidated an advance which had been achieved in 3½ years. The average level of these shares was now no higher than on April 15, 1926. But the severest break of any group on November 8th occurred in utilities, the market

¹ *Financial Chronicle*, October 18th, 1930.

favourites of 1929, which tumbled more than five points. The stocks of manufacturing and steel corporations declined about three points. Depression in the bond market was most felt by second-grade railroad issues. "We are witnessing," remarked the *Herald Tribune*, "a striking refutation of the argument that easy money alone will create and maintain a strong bond market."

By way of concluding this brief account of Wall Street conditions a year after the slump, it will be useful to transcribe from the *Herald Tribune*¹ some outstanding details of the movements of New York Stock Exchange securities:

The market valuation of all stocks listed on the New York Stock Exchange dropped \$5,117,472,488 during October to a total of \$55,025,710,617 as of November 1, it was revealed yesterday when official figures were released. The valuation of the list on October 1 was \$60,143,183,105.

The average valuation of each of 1,296,845,244 shares listed on November 1 was \$42.23, a decline of \$4.41 a share during the month, from \$46 84 for 1,284,052,185 shares on October 1. On November 1, 1929, each of 1,110,419,105 shares listed had an average valuation of \$64.62. On October 1, 1929, each of 1,048,359,263 shares had a valuation of \$83.06.

In other words, although 248,485,981 more shares were listed on November 1 this year than on October 1, 1929, the average market valuation of each share had dropped \$40.63, or nearly 50 per cent. Between October 1, 1929, when the total valuation of the list was \$87,073,630,423, and November 1, 1930, when the total valuation was \$55,025,710,617,

¹ Tuesday, November 11, 1930.

68 WALL STREET AND LOMBARD STREET

the aggregate decline in market valuation was \$32,047,919,-806, or somewhat more than 33 per cent.

On November 1, 1930, Stock Exchange member borrowings on security collateral amounted to \$2,556,124,087, making the ratio of security loans to market values of all listed stocks on this date 4.65 per cent, which compares with 5.79 per cent on October 1, when member borrowings on security collateral totaled \$3,481,452,761.

Some informative contrasts are brought into relief when these ratios are contrasted with those for the corresponding dates last year. On October 1, 1929, borrowings on security collateral totaled \$8,549,383,979, leaving a ratio of 9.82 per cent for security loans to market values of all listed stocks. On November 1, 1929, member borrowings on security collateral amounted to \$6,108,824,868, a ratio of 8.51 per cent to market values of all listed stock.

The following table of group valuations and totals as of November 1, 1930, shows some striking comparisons with the table immediately following, which carries group valuations and totals as of October 1, 1929. Listed stocks are classified by leading industrial groups, with the aggregate market value and average share price for each:

	Market values	Average price
Autos and Accessories	\$2,588,003,277	\$23.62
Financial	1,946,020,511	31.41
Chemical	4,016,741,086	62.12
Building	467,203,259	31.66
Electrical equipment mfg.	1,925,103,298	46.96
Foods	3,010,328,730	43.37
Rubber and Tires	280,711,102	21.32
Farm machinery	551,654,692	47.96
Amusements	602,983,367	27.06
Land and realty	152,098,535	28.99
Machinery and metals	1,667,543,177	33.55
Mining (excluding iron)	1,532,663,431	26.42
Petroleum	4,674,227,758	28.92
Paper and publishing	540,456,031	33.99

	Market values	Average price
Retail merchandising	2,565,372,079	36.06
Railroads and equipment	8,248,783,252	71.41
Steel, iron and coke	2,980,244,143	77.35
Textiles	180,950,619	16.56
Gas and electric (operating)	3,985,319,421	59.01
(holding)	3,521,927,192	38.05
Communications (cable, tel. and radio)	4,320,347,554	117.06
Miscellaneous utilities	320,191,907	30.73
Aviation	165,233,010	10.51
Business and office equipment	375,691,869	36.95
Shipping services	44,170,157	21.19
Ship operating and building	43,034,566	10.89
Miscellaneous business	162,350,098	43.12
Leather and boots	279,594,907	39.72
Tobacco	1,594,972,284	49.88
Garments	30,021,512	15.03
U. S companies operating abroad	1,158,476,107	32.11
Foreign companies (inc. Can. and Cuba)	1,113,291,686	26.47
All listed companies	\$55,025,710,617	\$42.43

The following table shows the relative data for October 1, 1929:

	Market values	Average price
Autos and accessories	\$5,671,827,543	\$54.38
Financial	2,477,774,155	184.58
Chemical	6,705,883,229	117.92
Building	773,069,915	77.45
Electrical equipment mfg. ...	4,856,142,246	179.20
Foods	3,726,146,644	71.38
Rubber and tires	498,399,626	47.74
Farm machinery	829,589,276	103.95
Amusements	919,707,667	50.13
Land and realty	168,619,932	51.55
Machinery and metals	2,980,825,981	73.30
Mining (excluding iron) ..	2,925,068,254	62.13
Petroleum	7,405,531,242	45.28
Paper and publishing	804,918,567	54.31

70 WALL STREET AND LOMBARD STREET

	Market values	Average price
Retail merchandising	4,864,301,414	78 24
Railroads and equipment	11,945,456,297	116 24
Steel, iron and coke	4,023,061,081	124.63
Textiles	334,487,721	33 47
Gas and electric (operating)	5,849,117,596	102 44
(holding)	5,124,645,077	112.51
Communications (cable, tel and radio).	5,139,813,786	206 43
Miscellaneous utilities	413,630,563	49 61
Aviation	563,995,594	39 26
Business and office equipment	973,726,593	100 96
Shipping services	87,543,522	64 63
Ship operating and building	87,639,992	22 17
Miscellaneous business	213,445,884	55 19
Leather and boots	419,098,741	59 35
Tobacco	1,578,478,197	59 00
Garment manufacturing	78,902,824	39.41
U. S. companies operating abroad	2,729,825,559	73 17
Foreign companies (inc. Can and Cuba)	1,902,955,705	65.74
All stocks listed	\$87,073,630,423	\$83.06

SIX-YEAR TREND TRACED

The appended table shows the growth of stock listings on the New York Stock Exchange, by months, since January 1, 1925, with a comparison of total shares, market values and average market prices on the first of each month:

1925	Shares	Market Value	Average Market Price
Jan. 1.....	433,448,561	\$27,072,322,192	\$62 45
Feb. 1.....	440,351,812	27,955,675,952	63.48
Mar. 1.....	442,492,569	28,189,238,970	63.70
April 1.....	446,831,843	26,895,314,077	60.19
May 1.....	453,357,420	27,674,870,259	61.04
June 1.....	456,903,702	29,084,289,065	63.65
July 1.....	462,596,258	29,695,331,268	64.19
Aug. 1.....	466,393,510	30,405,443,330	65.19
Sept. 1.....	468,338,683	30,629,461,461	65.40

TWELVE MONTHS AFTERWARDS

71

1925	Shares	Market Value	Average Market Price
Oct. 1.	469,698,711	31,126,442,766	66 26
Nov. 1.	478,643,437	33,733,662,129	70 47
Dec. 1..	482,234,320	33,430,655,337	69.32
1926			
Jan. 1	491,615,837	\$34,489,227,125	\$70 15
Feb. 1	503,223,768	35,179,021,114	69 90
Mar. 1. . . .	513,075,478	34,533,916,094	67.30
April 1. . . .	519,980,174	32,270,747,369	62 06
May 1.	528,897,575	33,456,926,872	63.26
June 1.	541,360,464	34,128,619,737	63.04
July 1.....	542,866,013	35,605,119,753	65.59
Aug. 1.	548,212,450	36,786,266,896	67.10
Sept. 1....	552,084,811	37,115,471,937	67.23
Oct. 1.	555,913,383	37,300,697,103	67 10
Nov. 1.....	560,607,736	36,296,302,537	64 12
Dec. 1.	564,961,163	37,034,394,712	65.55
1927			
Jan. 1.	585,641,222	\$38,376,162,138	\$65.53
Feb. 1.	592,224,494	38,602,044,866	65 18
Mar. 1.	595,206,136	39,966,306,016	67 14
April 1. . . .	601,682,353	40,126,835,948	66 69
May 1.	604,970,852	40,507,450,825	66 95
June 1.	614,423,339	42,529,863,513	69.21
July 1.	623,764,231	41,963,647,182	67.27
Aug. 1.. . . .	625,875,417	44,909,464,478	71 75
Sept. 1.	630,444,480	45,531,368,411	72 22
Oct. 1.	636,206,384	47,609,636,595	74.83
Nov. 1.. . . .	648,690,138	46,028,970,485	70 96
Dec. 1.....	648,398,740	48,526,525,537	74.84
1928			
Jan. 1... . . .	654,999,126	\$49,736,350,946	\$75.93
Feb. 1.	660,382,286	49,145,011,528	74.41
Mar. 1.....	665,288,951	48,484,707,019	72 87
April 1... . . .	671,859,779	52,371,329,870	77.94
May 1.....	675,143,333	54,818,925,860	81.19
June 1	683,610,126	55,735,456,606	81.53
July 1.....	688,359,697	52,930,378,356	76.89

72 WALL STREET AND LOMBARD STREET

		Market Value	Average Market Price
1928	Shares		
Aug. 1.....	696,130,800	53,728,776,349	77.18
Sept. 1.....	705,667,121	57,385,881,463	81.32
Oct. 1.....	711,197,109	59,332,123,511	83.42
Nov. 1.....	727,792,206	61,075,813,465	83.91
Dec. 1.....	741,680,869	66,113,255,317	89.13
1929			
Jan. 1.....	757,301,677	\$67,472,053,300	\$89.09
Feb. 1.....	807,858,244	71,060,397,412	87.96
Mar. 1.....	842,521,997	71,871,889,736	85.30
April 1.....	862,725,570	69,770,122,189	80.87
May 1.....	897,482,085	73,718,875,840	82.13
June 1.....	932,325,207	70,921,426,187	76.06
July 1.....	945,341,007	77,264,128,909	81.73
Oct. 1.....	1,048,359,263	87,073,630,423	83.06
Nov. 1.....	1,110,419,105	71,752,650,908	64.62
1930			
Oct. 1.....	1,284,052,185	\$60,143,183,105	\$46.84
Nov. 1.....	1,296,845,244	55,025,710,617	42.23

As shown by the above table the average price of each share listed on the Stock Exchange as of November 1, 1930, is the lowest since the exchange authorities began issuing the compilations of total and average valuation on January 1, 1925.

By way of winding up this lugubrious story, it may be added that in the week ending November 23, 1930, no less than 124 banks in the Middle West and South closed their doors; and though many of them were very small institutions, the influence of these failures on business in the districts directly affected was bound to be disturbing. As revelations of banking incompetency they were surprising only to the uninformed;

but it may be hoped that a long succession of minor failures, followed by several serious casualties in New York and Philadelphia, will awaken public opinion to the need for drastic reforms.

II. THE SEQUEL
THE TRADE DEPRESSION OF 1930

CHAPTER I

LOMBARD STREET AND THE DEPRESSION

FROM Christmas, 1929, onwards the centre of interest shifts from Wall Street to Lombard Street—in other words, from the collapse of the speculative boom in American stocks and shares to a world-wide trade depression and slump in prices, which find more representative reflections in Lombard Street and Throgmorton Street than in Wall Street or any of the Continental bourses. The reason for this is not far to seek. Owing to Free Trade and a stable gold currency and to the marvellous development of British commerce and shipping in all parts of the world, London after the middle of the nineteenth century was rapidly developing into the great financial centre to which other countries looked for capital and credit and all forms of accommodation. The gold bill on London became the recognized medium of international commerce and exchange. Britain was a free port and a free market in which the world bought and sold all kinds of merchantable articles or produce; and these were conveyed to or from London mainly in British ships with the financial aid of

London bankers and of Lombard Street, the world's discount market.

As profits accumulated, enterprising British capitalists built railways and developed trade and plantations in the British colonies, South America, India, Malaya and China. Many of these new undertakings were financed by Stock Exchange loans. In the fifty years preceding the Great War, British capital exports grew from an annual value of about 20 millions to an annual value of some two hundred millions sterling. Thus the vast international trade and shipping and profits of Great Britain were, and still are even after the prodigious losses of the Great War, reflected in the international character of the London Stock Exchange list, where one may find quoted the bonds and stocks of foreign and colonial governments, foreign and colonial cities, as well as railways, docks, industrial enterprises and land companies in all parts of the globe. All these public and private concerns have, at various times in the last half-century or more, dipped their hands into the capacious purse of John Bull, who has always been ready to oblige a good customer, and is usually well-informed about the means and trustworthiness of those who ask him for ready money or extensions of credit.

Just because of his world-wide investments and business connections, with an overseas' trade far exceeding that of his rivals and competitors, to say nothing of a merchant fleet equalling that of all other nations combined, John Bull suffered more than

others from the slump in international trade, which began soon after the war and has lasted, with a few ups and downs, ever since. Most of his misfortunes are shared with competitors; but an unfair burden of War Debts has fallen on his shoulders owing to the incompetence of those who negotiated the British War Debt Treaty at Washington; and German Reparations have ousted him from valuable coal markets on the Continent. The great coal strike of 1926 was a calamity of his own making, but British trade has also felt with peculiar severity the effects of rising protective tariffs in India, Australia, Canada and the United States.

But our concern is with the deepening depression of 1930, which followed hard upon the financial catastrophe. Trade was already suffering when the collapse took place. For the Wall Street boom, in combination with the hoarding policy of the Bank of France, had brought about dear money and high discount rates all over the world in the summer of 1929. This artificial stringency was already affecting business in the United States when the inflated balloon burst in October. The cheapening of money which resulted gave real relief to European finance and commerce, and was considered a hopeful factor in the outlook for 1930.

But the advent of cheaper money brought no revival of speculative activity. A leading broker on the London Stock Exchange wrote in January, 1930: "By common consent 1929 has been voted the most dis-

astrous year the Stock Exchange has experienced for a very long time, if indeed it has ever before had to meet (through a rapidly following series of events) such a great depreciation in security values as was experienced during the closing months of last year." The spectacular crash and panic, which ended the boom in America, luckily did not precipitate a banking and monetary crisis; and although a few big London speculators were said to have lost millions through dabbling too long in American stocks and shares, nevertheless it is certain that British investors as a whole were not deeply involved in the American débâcle. Unfortunately they had bitter experiences of their own; for several adventurous financiers, including the notorious Hatry, deprived credulous investors and foolish gamblers of many millions sterling. The collapse of rubbishy stocks, which had attracted buyers during the boom, accounted for a depreciation of good securities, which necessarily suffered from enforced liquidation. The Hatry disclosures, unparalleled in respect of the successful forgery of stocks and certificates, shook confidence in the perspicacity of bankers, who had extended credit so freely to persons whose records and character certainly did not deserve it.

Probably the English joint stock banks supported too many "lame ducks." This sort of hospital treatment for financial cripples and industrial invalids is always costly and seldom successful. Many critics, at the time, agreed with Sir Arthur Balfour's hard

saying, that what the country then needed and most wanted was a number of honest and undisguised bankruptcies, which would clear the air and give opportunities to young and enterprising business men. In this connection it is worth observing that enormous sums have been lost since the war in amalgamations floated by city financiers (and often supported by banks), which have been plausibly recommended to the public as examples of "rationalization." British bankers have quite enough to do without trying to manage manufacturing or commercial concerns. Their first business, after all, is to take care to keep their resources liquid and to distinguish between a bill of mortgage and a bill of exchange. In spite of their losses, all the big banks were able to maintain their dividends in 1930. Secret reserves and contingent funds are features of British banking, which help to reassure English business men even when they are shocked at such blunders as the credits extended to Hatry and others of his kidney.

Meanwhile, the true functions of banking and the obligations which a central bank owes to the community have been much discussed, and the traditions of Lombard Street are being challenged by modernist critics, including Mr. Keynes and his school, as well as avowed socialists, many of whom think that the way to enrich a community is to print plenty of paper money, or to compel the banks to extend credit freely to all who want it most, and perhaps least deserve it. The old view, which some of us still hold,

is that the principal function of banks is to keep their resources liquid and to avoid dangerous commitments, such as investments in mortgages or shares in industrial undertakings. We were therefore not a little astonished when, early in 1930, the Bank of England, of all institutions in the world, subscribed to a new issue of shares by a company called the United Dominions Trust, whose principal purpose is to finance the purchases of goods on the instalment principle. The company was said to be concerned mainly with engineering products, and its method was (according to the *Economist*) "the discounting of bills for the whole series of payments drawn by the vendor." One can only hope that so novel and dangerous an experiment will not serve as a precedent either for the Bank of England or for any of the Joint Stock Banks.

London was not much impressed by announcements in the Paris newspapers in January, 1930, that the French Government and the Bank of France were accumulating gold and taking various other steps for the purpose of making Paris the financial centre of Europe, if not of the Universe. The Governor of the Bank of France will certainly not achieve such a purpose by hoarding gold or silver like a peasant; nor can Paris become a rival of London until its money market is free and its discount facilities available to foreigners.

Not the least of Lombard Street's troubles at the beginning of the New Year (1930) was a crisis in

Shanghai and Hong Kong, caused by a collapse in the price of silver, which, at the beginning of February, touched a new low record, dropping to a fraction under twenty pence per ounce. The demonetization of silver in India, and the debasement of silver token money or its substitution by nickel coin in many countries, were held responsible. The vagaries of silver in terms of gold, or of gold in terms of silver, have certainly been extraordinary during the last half-century. Messrs. Pixley & Abell, the well-known bullion merchants, have recently compiled an exhibit of the monthly fluctuations in the gold price of silver since 1833. From 1833 to 1873, the yearly average, thanks no doubt in part to bi-metallism and the Latin Union, only varied from 59 to 62 pence. Then the collapse began, as Governments deserted silver for gold or paper money. But the War played havoc with gold and for a time resuscitated silver. The yearly average price of silver in London rose from twenty-three and eleven-sixteenths pence in 1915 to sixty-one and seven-sixteenths pence in 1920. It should be remembered, however, that the depreciation of gold in terms both of silver and of commodities was exaggerated by the London price; for in 1920 Great Britain had not yet returned to a gold basis and its paper money was at a discount in terms of gold.

In their annual circular for 1930, Messrs. Pixley & Abell referred to a curious situation which had developed in the British Crown Colony of Hong

Kong. In 1922 the Hong Kong Government prohibited the export of silver dollars, and thenceforth payment in bank notes became the ordinary basis of exchange in business; consequently the silver dollar, though remaining nominally legal tender, fell to a heavy discount and was being superseded by notes. But this disparity of notes and silver became so inconvenient that in October 1929 it was decided to re-establish a silver currency, and about sixteen million ounces of silver were bought in Bombay and London for conversion into new silver dollars. But, from 23 pence in October, silver had fallen, as we have seen, below 20 pence in February, and the Hong Kong Government again found itself in a quandary. There was also a large bear account in the Indian bazaars, which boded ill for the future.¹

At the annual meeting of the Hong Kong and Shanghai Bank, about this time, the situation of Far Eastern trade was described and discussed by the Chairman, Mr. W. H. Bell, in an authoritative survey which was to some extent reassuring, not only to shareholders of the bank but also to traders and investors in the Far East. In spite of everything the bank had enjoyed a good year. Its profits, calculated in silver, were higher in 1929 than in 1928; but a fall of 25 per cent in the exchange during the year substantially diminished the sum available for pay-

¹ At the end of November 1930 the gold price of silver was only a fraction above 16 pence per ounce, and it fell below 14 pence to new low records shortly afterwards.

ment of the dividend in sterling. A fall in the gold price of silver is injurious to Chinese as well as to Indian trade, because such large stocks of silver are held in private hands that a fall in silver not only upsets the exchanges and bazaars but brings ruin on numbers of merchants and diminishes the purchasing power of the people. The slackness of Far Eastern trade was shown in cash increases of the Chinese banks; for disturbed trade conditions had restricted the circulation of silver. The weight on the silver market was augmented by Indian Government sales, and also by continental sales of silver, presumably released when the French authorities in Indo-China decided on the transfer of its currency to a gold basis, an operation which they had now practically accomplished. Shanghai Exchange quotations during 1929 fell from two shillings and seven pence farthing to twenty-five pence per tael for telegraphic transfers to London. Curiously enough, the highest figure occurred on the first day of the year and the lowest on the last day.

Mr. Bell drew a rather dismal picture of Chinese conditions. Brigandage and famine had played their familiar rôles, and the fall of silver, added thereto, made things worse. Then in the autumn came the crash in Wall Street, "and the end of the year 1929 saw business in China at an unusually low ebb, with little prospect of an early turn of the tide." Among staple imports, British cotton goods suffered from a substantial increase of output by the local Chinese

mills, as well as from the ending of the boycott of Japanese imports, which flooded the market with cheap goods. The improvement of Chinese roads and railways was the most hopeful feature of the year 1929; but all attempts to restore peace and security, as well as the effort to reform Chinese finances, had failed.

India likewise had a poor year in 1929, and there also conditions deteriorated after the slump in Wall Street. The trade of the country generally sagged. The jute and gunny (coarse sacking) markets were suffering from abnormally low prices. Bombay cotton manufacturers complained bitterly of bad trade and induced a compliant Viceroy's Council to give them increased protection which, with the boycott of 1930, hit both Lancashire and Japan very hard.

As for Japan, its trade for 1929 showed a marked improvement over the rather low level of 1928. Exports increased, and from the middle of 1929 onwards the Japanese Government "set itself strenuously to raise the value of the yen in preparation for restoring the currency to its old basis." This was accomplished on January 11, 1930; but the rise in the exchange value of the yen had the immediate effect of depressing home prices and restricting commerce, and the year 1930 brought to Japan the most severe trade depression of modern times.

In the Straits Settlements and Malaya, trade conditions deteriorated throughout 1929 and 1930. The world's consumption of rubber was outstripped by a

formidable increase in production, and the price eventually fell to fourpence per lb, at which most plantations became unprofitable. The tin mining industry presented similar features, and prices receded to abnormally low figures. The heavy losses following on the Wall Street collapse were hitting American manufacturers and restricting their purchases of raw material. This speedily reacted on firms handling Far Eastern produce, such as rubber, tin, hemp, sugar, and silk, making it difficult to dispose of an increasing production.

As the year 1930 wore on, the industrial and agricultural situation in almost all parts of the world grew worse rather than better, and much greater financial calamities would certainly have occurred but for the steady fall in money and discount rates which relieved the pressure on Germany and helped London to supply temporary or permanent funds to Brazil, Australia and other distressed debtors. Abundant supplies of money for short periods at from one to three per cent in London, Paris, Amsterdam and New York failed to bring about an expansion of trade; but they certainly lightened the hardships of merchants and manufacturers, and diminished the long, dismal train of insolvencies.

In a clever criticism of the view that scarcity of gold and currency was the cause of trade depression, and that the cure must be sought by removing the scarcity, the London *Times* City Editor wrote (November 24, 1930): "There is, however, little evidence of

any scarcity of either. America, for instance, has a huge gold stock and a credit-creating power far beyond anything she is making use of at present. The same might be said of France; and in this country the difficulty of banks is to find borrowers of the credit they are anxious to lend." In truth, credit cannot be used unless someone has the confidence to use it, and unless the bank shares the borrower's confidence. A ragged man's demand for clothes is only effective if he has money to pay for a suit, and if someone else has a suit for sale. So there may be a plethora of gold and credit when a bankrupt company or country asks for a loan, and those who have both gold and credit in abundance refuse it. Confidence and credit go hand in hand, and, as the *London Times* put it, "any attempt to make credit flow where there is distrust would lead to disaster." To Lombard Street this is the pure milk of the word.

It was thought at Christmas, 1929, that the year 1930 would see a slow business recovery in the United States and a gradual resumption of confidence in Wall Street. Neither happened. "It will be a long time," wrote a New York reviewer in the first week of November, 1930, "before the country gets back to the stimulated activity of the early months of 1929; but a country like the United States with a population of 120 millions can never come to a complete standstill, and we appear to be getting very close to that now. Production in every line of industry during 1930 has been curtailed as never be-

fore; and though consumption has also been curtailed, it cannot be long before supplies will have to be replenished all round. Unfortunately the agricultural situation still causes great and grave concern; and so long as that remains so, the consuming capacity of one important part of the population (about one-third) will stay impaired, making recovery less speedy than would otherwise be the case."

Statistics and estimates of curtailed production were confirmed by the high record of insolvencies and defaults, especially among brokers and manufacturers. For the first ten months of 1930, according to Dun & Co's record, 21,799 commercial failures were reported in the United States, with total liabilities of over 529 million dollars, against 19,076 in the first ten months of 1929, with 363 million dollars of liabilities. The October figures were worse than those of the preceding nine months, and included 83 large failures. These were to be followed in November and December by an epidemic of bank failures all over the United States. In the week beginning November 17th a hundred small banks stopped payment, and before the end of December it was stated that out of 24,000 (so-called) banks in the United States about a thousand had closed their doors during the year.

In the month of November, 1930, the fraudulent failure of a French financial adventurer named Oustric, whose career bore a family resemblance to that of Hatry, led to a number of provincial bank

failures in France and to a general uneasiness among French depositors, who began to draw out money. In spite of its vast accumulations of gold, the Bank of France proceeded to drain further supplies from London. Meanwhile, the peseta was falling in Spain, and Italy seemed to be on the verge of an industrial crisis. The success of the Hitlerites at the general elections in Germany frightened foreign investors, and by the end of November the new German Reparation Bonds had fallen eighteen points below the issue price. No wonder that Lombard Street, in its despondency, was inclined to lay a heavy responsibility on Wall Street for one of the most disastrous years in the history of modern business.

CHAPTER II

MONEY MARKETS AND BANKERS

TO understand the relationship, a very intimate one, between the money markets and stock exchanges of the world, including the effect of gold supplies upon credit and prices both in the stock markets and in the money markets, every reader, who would trace to their causes and follow to their consequences the amazing events I have described, should provide himself with an elementary technical knowledge of the New York and London money markets. He should start with the fact that in gold standard countries prices are gold prices and that in the long run a general rise or fall of prices is brought about by a change of relationship between the total stock of monetary gold in the world and the total amount of commodities. Upon the stock of gold, which varies comparatively little, as the ratio of its annual production to the existing stock is so small, there is erected a superstructure of credit. The size of this superstructure in any country may vary rapidly with business psychology, though in countries with a modern system of central banking, a legal or conventional minimum ratio of gold to credit has been established.

If the total volume of commodities remains unaltered while that of gold and credit expands, prices will tend to rise, and there may be an inflation which will lift, more or less rapidly, price levels both on the stock exchange and in the commodity markets. If, on the other hand, the volume of gold and credit is contracted through hoarding and sterilizing by the central banks, or through a decline of speculative enterprise, or any other cause, prices will tend to fall; and if the previous rise has been great, and the decline is rapid, a panic or collapse in a particular country, or in a number of countries simultaneously, may take place. These considerations on their practical side will be developed in a later chapter on the plight of the farmers and the causes of the depression.

What we have now to elucidate, as briefly as may be, are the technical conditions of the money and discount markets in New York and London. The size and importance of New York's money market is mainly due to the magnitude and activity of New York's Stock Exchange, and in a lesser degree of New York's commodity markets; for we have to remember that not only is the American nation the richest and the most speculative in the world, but that practically the whole of its Stock Exchange speculations, as well as a large fraction of its commodity speculations, are concentrated in New York.

In their comprehensive work on Investment Banking ¹ Professors H. Parker Willis and Jules I. Bogen

¹ Harper and Brothers, 1929.

say that the term "money market" is usually applied to the aggregate of buyers and sellers who deal in short-term loans and obligations, though it is often restricted to the market for call loans secured by stock and bond collaterals. In a broad sense, the New York money market may be classified into seven sections.

1. The call-money market, for loans secured almost exclusively by stocks and bonds. These call loans—I follow the guidance of Professors Willis and Bogen—are loans repayable at the option of lender or borrower within twenty-four hours notice; but if not "called" they may continue in force indefinitely. The term "call loans" is sometimes identified with brokers' loans; but the latter term covers only call loans made to brokers in the expectation that they will be re-loaned to clients who are buying securities on margin. As a rule in New York, a bank, instead of lending directly to an individual who wants to speculate in this way, furnishes funds to the broker, who in turn re-loans to his client. Stock brokers are always trying to borrow as cheaply as possible, and their requirements have created another class of brokers who mediate between borrowers and lenders. In recent years a "money post" or "money desk" has been instituted on the floor of the New York Stock Exchange, where offers of money and bids for money are received, and lenders and borrowers brought together. In this way there has been established a highly sensitive rate of interest, which

responds to fluctuations in the demand and supply of money. "The great bulk of the call loans made on the New York money market, the dominant money market in the country, are made at the rate fixed at the money desk of the New York Stock Exchange. Each morning at 11 A.M. a 'renewal rate' for call loans is determined by the Stock Clearing Corporation, based on expectations of what the supply of, and demand for, funds will be during the day. Any borrower or lender not satisfied with this rate can call his loan and make a new loan in the market."¹ Loans are also arranged directly from banks or with the help of money brokers not on the floor of the Exchange.

2. Another section of the New York money market is the market for "time money," which consists of collateral loans running from 30 to 180 days. The time-money market resembles in most respects the call-money market; but it also serves to bridge the gap between call money and short-term investments, such as Treasury Bonds and certificates. Normally the lowest rates in the money market are for call money, with time money a little dearer, while short-term bonds usually yield rather higher rates of interest. This normal relationship, however, may be entirely reversed during a Stock Exchange boom, as, for example, on July 1, 1929, when the following rates were in force:

¹ See Willis and Bogen, *op. cit.*, p. 242.

Call-money rate (renewal)	10%
Time-money rate	7¾-8%
Yield on U. S. certificates of indebtedness....	4.80%
Bankers' acceptance rate	5½%
Federal reserve rediscount rate ..	5%
Prime commercial paper rate	6%

3. A third section is the market for short-term government securities, such as the government certificates of indebtedness, which are held by banks and large corporations.

4. Another section of the New York money market is concerned with bankers' acceptances, now largely used for the financing of foreign trade. The average of bills outstanding at any time only amounts to about 12 hundred million dollars, and consequently purchases by the Federal Reserve Banks exercise at times an important influence on the rates for these bankers' acceptances, which are considered to be almost as safe as the government certificates of indebtedness for purposes of short-term investment.

5. Fifthly comes the market for what is called "negotiable commercial paper." Commercial paper signifies any paper made by a commercial borrower to obtain funds from the banks for a short term. But in New York it is normally used in a technical sense of paper placed upon the market to provide current funds or working capital for enterprises which do not care to borrow from local banks. A borrower will discuss his needs with one of the so-called "commercial paper houses," which, if satisfied that he can be

trusted, will undertake the sale of his commercial paper.

6. Sixthly come the "over-the-counter" loans by bankers to their regular borrowing customers; and lastly

7. There is the market for credit at the Reserve Bank, which member banks obtain by the legal process of rediscounting.

In the second volume of his authoritative work on the Federal Reserve System,¹ Mr. Paul M. Warburg publishes a suggestive essay on the discount system in Europe by way of contrast with the organization of money and credit in the United States. The discount market, i.e., the market in which bills of exchange are bought and sold, is, he says, the foundation of the European financial system, whereas the American financial system is based upon bonds and stocks. "Bank notes in Europe are issued mainly against bullion and discounts; in the United States mainly against bullion and bonds. The quick assets held by European banks against their deposits consist of discounts, or call loans largely secured by discounts. The quick assets of American banks—promissory notes being unsalable and cash reserves being unavailable—are primarily call loans on stock and bond collateral . . . as a majority of discounts represent goods in process of production or on the way to consumption, liquidation of discounts ex-

¹ The Federal Reserve System, by Paul M. Warburg, Vol. II, pages 183-215.

presses itself primarily by a falling-off in a new production, while the consumer, on the other hand, cannot stop consuming and must therefore continue to pay. The brunt [of liquidation in Europe] is thus borne by the whole nation, and adjustment follows without violent convulsion."

In sharp contrast with the European system—I would have preferred to say the English system—Mr. Warburg (writing in 1910) sets that of the United States, where attempts to liquidate "are directed primarily at the takers of stock exchange loans," who are forced to sell their securities. This they can only do by finding new investors, who at such times are scarce owing to lack of funds or widespread distrust. Hence securities to be sold must be offered at very low prices, "and low prices caused by distrust not only frighten away purchasers but in addition unsettle the owners of securities and thus cause them to join the ranks of the sellers. An acute convulsion, therefore, must inevitably follow before the tide can be turned." Whether Mr. Warburg exaggerates the contrast is an open question; but it is certain that his diagnosis proved correct in the autumn of 1929, when the panicky collapse of Wall Street was accompanied, or followed, by bearish but orderly liquidation in London and on the European bourses. Mr. Warburg's contrast is not, of course, absolute. General liquidation in Europe, as he admits, includes liquidation of securities, just as liquidation in the United States includes liquidation of com-

mercial paper as it matures. The difference he insists upon is that in Europe "bills will be the main factor, and securities will play a much more subordinate part, while with us just the reverse is true."

Since Mr. Wárburg wrote this essay, the developments of the Federal Reserve system have enormously improved credit and currency in the United States; indeed, for a time during and after the war the gold dollar bill threatened the supremacy of the London discount market, because the gold bill on London had been replaced by the inferior paper sterling which fluctuated at a discount below gold values. With the return of Great Britain to a gold bullion standard in 1925, this inferiority was removed, and London rapidly regained something like its old ascendancy, though its discount market is far more dependent upon Treasury Bills (and consequently upon the government and the Bank of England) than it was before the war. London's large holdings of foreign bills, and its position as an international clearing centre, as a shipping centre and as a free market for goods, are among the factors which still help to maintain the superiority of its discount market over all rivals, though it has lost some of its American business to New York and of its Continental business to Amsterdam.

Bills of exchange are almost as old as the history of credit. The Lombards brought them to London, and Lombard Street in competition with Amsterdam developed the modern system of banking and exchange. A bill of exchange has been defined as an

unconditional order in writing, given by one person, the drawer, to another person, the drawee, requiring him to pay a given sum of money either at sight or at some future and defined date to the order either of the drawer or of some third party specified in the bill. If the drawee agrees, he "accepts" the bill by writing the word "accepted" across the face of the bill, and attesting it with his signature and the date. Henceforward he is known as the "acceptor." The drawer can sell the bill, and so turn it into money before it matures; but the ease with which he can sell it, and the price he can obtain for it depends largely upon the reputation of those whose names appear upon the bill.

If a bill were drawn upon and accepted by a small trader in some English country town or obscure corner of the world, his name would not be known to those in the City of London who make it their business to buy bills. Yet he might be a perfectly sound and honest man, who always met his bills when they fell due; and this fact might be known to his local banker. In such cases, in return for a small commission, expressed as a percentage of the face value of the bill, bankers to-day are prepared to enter into arrangements to accept bills drawn on their customers. By accepting the bill, they give it their own backing, and obviously a bill accepted by a leading British bank can be discounted much more readily than one accepted by a small and unknown trader. Such a bill is known as a "bank bill."

This side of a bank's activities is clearly useful to

trade. If the seller of goods knows that the bill he draws on the buyer will be accepted by a big London bank, he knows that he can sell his bill at a better price, and he also knows with absolute certainty that the bill will be met. Hence he will sell more readily and can also quote a slightly cheaper price for his goods, all of which helps trade.

The London joint stock banks have only undertaken this work on an appreciable scale within the last twenty years. There has long existed in the City of London a group of famous institutions known as Accepting Houses, and, as their name implies, one of their main activities is that of accepting bills on behalf of their clients, who are scattered all over the world. But, whether it is a bank or an accepting house that accepts a bill, the result is the same.¹

The origin of Treasury Bills is quite recent. I remember the late Lord Welby, who was for many years Permanent Secretary to the Treasury, telling me how the Chancellor of the Exchequer—Sir Stafford Northcote, I think—sent him to see the late Mr. Walter Bagehot, then Editor of the *Economist*, to ask him if he could suggest an improvement on the bills issued by the Government in order to make them more attractive to the London market. The late Mr. Bagehot, after thinking the matter over, said: "The Treasury ought to imitate as closely as possible the ordinary commercial bill of exchange,

¹ I have borrowed some of the above details from a useful article in *Lloyds Bank Monthly Review* for December, 1930.

usually a three-months' bill." Mr. Bagehot's suggestion was adopted, and the Treasury Bill is the result. The volume of Treasury Bills is now at least equal to the volume of commercial bills; so useful has this mode of financing become. *

I have already mentioned that before the war I used to pay regular visits to the Bank of England, and had the good fortune to make friends with the chief of the Discount Department, Mr. H. W. Search, one of the ablest men in the city and one who delighted to employ an acute mind and unique experience in establishing sound theories of banking and currency. He would devote himself with relish to the exposure of fallacies and to the confusion of plausible humbugs in the city and elsewhere. Mr. Search lodged in my head several truths and dogmas which have served me well ever since, and proved invaluable to me as a journalist during the American panic and consequent gold crisis in the autumn of 1907. Two of these may here be cited. The first relates to the kind of securities which an ordinary bank, a deposit bank, should accept when it is making loans to its customers. It is obvious that a bank ought not to accept securities of doubtful value. Its holdings should be safe. But safety is not enough. Its holdings should also be liquid, that is to say, easily salable at any moment or at a near date. Mr. Search was fond of illustrating this principle from a saying which he attributed, no doubt correctly, to an able financier, well known in early Victorian days but now

forgotten, Charles Poulett Thomson. Poulett Thomson said, "Banking is the easiest business in the world. You have only got to know the difference between a bill of mortgage and a bill of exchange." He meant, of course, that a banker should eschew bills of mortgage or similar securities because they are "frozen assets" which cannot be turned into cash at any moment, and that he should invest in bills of exchange. These are now usually Treasury Bills or commercial bills, and are short-dated securities, payable as a rule three, four or six months hence. The distinction is all-important. Probably more banks have had to close their doors through neglecting it than for any other cause. A clever, pushful, ambitious banker naturally tries to persuade himself that it is safe to put the bank's money out at high rates of interest in order to earn large dividends; but this type of speculative banker is almost sure to come to grief.

A second lesson which I carried away from my conversations with Mr. Search and would like to impart, sounds simple enough, but happens to be highly controversial. It is the doctrine that a good banking system shows its excellence in the economy of gold. In a sense, of course, this is not merely a truth but a truism, a platitude. The invention of credit and paper money and cheques has been of inestimable value to business and commerce, for this very reason that it enables business transactions on a vast scale, both at home and abroad, to be carried on without actual transfers of gold coins or gold bullion.

The cheque is really a marvellous instrument. It is a wonderful convenience to be able to pay the exact amount you wish to pay to any person in any part of the country by writing a few words and figures upon a printed cheque, and sending it by post without the slightest risk of loss if you cross it to the account of payee. And yet in France and many other civilized countries the cheque system has hardly developed at all. Indeed, in France—as Dr. Leaf said at the end of his book on banking—“all deposit banking is still in its infancy.” The French use far more paper money than we do, and it is the custom in business instead of paying by cheque to pay by accepting bills for quite small amounts. In Dr. Leaf’s words, “the mass of small traders still adhere to the practice of keeping their cash at home, and large expense and great risks have to be incurred by all (French) banks in the employment of messengers who go round to private addresses to collect payment of bills, often of quite trifling amounts.” Before the war they had no clearance system even in Paris, and they still have no free money or discount market, though they now talk of imitating these London institutions.

You sometimes read, or hear it said, that gold is the basis of credit. That cannot be true; for you may have credit, and you do have credit, in countries without a gold standard, where the currency is silver or inconvertible paper money. The basis of credit is not metallic but moral or economic. It is, in a word, credibility or trustworthiness; and one of the chief

aims of a deposit banker is to find out who are the trustworthy people in the district which his bank serves; and secondly, in the case of those who are ready to put up securities for an advance, what is good security? A third question bankers have to ask themselves is "How much can we lend? What should be the proportion of our cash and liquid assets to our liabilities." The answer to this third problem ultimately rests in Britain with the Bank of England, which holds the central gold reserve and has to see that the proportion of that reserve to liabilities does not fall too low. If, in the judgment of the Governor and Directors of the Bank of England, the reserve and the proportion are too low, the Bank will raise its rate. Before the war, when we enjoyed a full gold currency and all notes were convertible into gold, the Bank of England had two dangers to provide against—the danger of an internal drain through a run on the banks (as happened in the Overend Gurney crisis in 1866) or of an external drain like that caused by the American crisis and panic in the autumn of 1907, when over twenty millions of gold were drawn from the reserve of the Bank of England and exported to the United States.

It is a maxim of currency and banking that in a time of panic when there is a run on the banks, the true and only remedy is for the banks, with the assistance of the central bank, to lend freely to all trustworthy persons who need accommodation. Consequently, in the last resort the remedy for an inter-

nal drain before the war was a suspension of the Bank Charter Act of 1844, for the purpose of enabling the Bank of England to issue notes beyond the legal amount without gold cover on the written authority of the Prime Minister and Chancellor of the Exchequer, who undertook, if necessary, to obtain the sanction of Parliament. This power was granted to the Bank three times—in 1847, in 1857, and during the Overend Gurney panic of 1866. The last and by far the most serious crisis requiring special currency measures occurred on the outbreak of the Great War in August, 1914, when the gold standard was practically abrogated and an era of inconvertible paper money instituted in Great Britain for the first time since the Napoleonic Wars. The gold standard was restored in a modified and restricted form eleven years later, in 1925.

The new gold standard, which was substituted for inconvertible paper money in 1925, is distinguished from the old gold circulation standard as a gold exchange standard, or, more properly I think, as a gold bullion standard. With it the risk of an internal gold drain has disappeared. Under our system the Bank of England has to preserve a certain proportion between its gold and its liabilities; and consequently if the market goes on borrowing, it will eventually raise the rate of discount, as it did during the American crisis of 1907, or as it did last autumn after the Wall Street crash, from 3 to 4, and from 4 to 5, and from 5 to 6, and from 6 to 7

per cent, until the rate is so high that the demand for accommodation ceases. Then the reverse process happens, or may happen, as it has done in the last few months. The market rate declines. There are more lenders than borrowers. The official bank rate becomes so much higher than the market rate that it ceases to be in any way effective, and the Bank of England will then follow the market rate downwards until a balance is again reached, like the 3 per cent which we are at present ¹ enjoying.

Banks, by the way, are not philanthropic institutions, and that is a reason why the public, their customers, are, or ought to be, averse to anything like a banking monopoly. Up to a point, the elimination of small banks and their amalgamation into larger units was defensible and desirable from the standpoint of security. A century ago in England, as now in the United States, a commercial or stock exchange crisis would bring about a panic, during which numbers of small banks would close their doors. The danger now is that with five great banks and only a few smaller ones there may be what is called a "gentlemen's agreement" not to give the public the full benefit of cheap money. For example, during this year (1930) the bank rate has fallen rapidly and is now only 3 per cent. At the same time the open market rate for short loans has been lately only about 2 per cent and the discount rate for three months' bills only about $2\frac{1}{8}$ per cent. But the banks

¹ December, 1930.

are still charging most of their customers 5 per cent for overdrafts. Big customers, we are told, can get lower rates; but why should not ordinary people, on depositing sufficient security, be able to get accommodation at rates more nearly in accordance with the official minimum of the Bank of England? If there were real competition between banks the small trader and the small customer might receive better treatment.

I am not one of those who think that credit and the power to borrow what one has not got are necessarily good things. Many institutions have been ruined by lending more than they can afford for wrong purposes or to wrong persons. Many individuals have been ruined by being tempted to borrow for speculations which turned out unfortunate. The great Wall Street crash of last autumn, which is still reverberating through the world, was brought about mainly because the American nation gambled for months on money lent by the banks.

CHAPTER III

THE COLLAPSE OF PRICES AND THE PLIGHT OF THE CULTIVATOR

AN acute depression among pastoral and agricultural communities, which spread over the world in 1930, arrested the attention of economists and forced statesmen to attempt remedies (wise or unwise) to alleviate the situation. London's immense investments in countries like India, Malaya, Australia and Argentina, and its important interests in the prosperity of all nations with whom Britain maintains commercial, shipping and banking connections, made it even more sensitive than New York to the plight of cultivators.

I am not one of those who believe that dearth and scarcity and high prices are more to be desired than cheapness and plenty. But it is a curious fact that, outside the United States,¹ the general complaint in 1930 of those who produce food and raw materials has been not of drought and famine but of glut and superabundance. In my view, if prices could be allowed everywhere to find their natural level through the law of supply and demand, and if

¹ The reference is to the drought in the Middle West which damaged the maize crop in the early autumn of 1930.

tariff obstructions could be removed, so that agriculture and industry might exchange their products as freely as they do between the states of the American Union, a rapid and effective cure would be available; and the whole world (apart from local droughts and famines) might reasonably count upon the economic prosperity that normally attends upon peace. But as things are, most governments, even of the pettiest and poorest countries, have been trying desperately to combat low prices by higher tariffs and more restrictions upon imports, or by bounties upon exports; and many of them, like Brazil and Australia, have sought for years by a course of ruinous borrowing to maintain a fictitious appearance of prosperity. A whole book might be written on the failure of restrictive schemes and valorization loans and other devices; but in the moderate compass of this article I can only hope to touch here and there upon points of outstanding interest.

To start from the farthest East, the collapse in the price of its most profitable export, silk (owing mainly to the diminished buying power of the United States) is largely responsible for the most severe depression of trade and employment that has yet been experienced by modern industrialized Japan. The Japanese Press reported in August: "Farmers are so hard hit by the bad times, especially as regards silk, that they can no longer afford to eat rice and are taking to potatoes instead." Soon afterwards a slump in rice caused general distress among the rice

cultivators; and the whole farming community of Japan was reduced to despair.

Compared with some previous years, prospects in China were rather better. In most parts, the harvest was fairly good; and trade reports from Shanghai were more encouraging. But the Dutch East Indies were hard hit by the low price of sugar and the sensational fall in rubber; and the British Malayan States, which depend almost entirely for their prosperity upon rubber and tin, fell into a temporarily bankrupt condition, with rubber at fourpence a pound and tin unusually cheap.

In India, the jute growers had to face a drop in jute prices to about 60 per cent below those of September, 1913. The consequent losses of Bengal were estimated at 30 millions sterling as compared with normal years.

Passing westward to Egypt, we find the Egyptian Government involved in a costly attempt to bolster up the price of Egyptian cotton for the benefit of the peasants. The attempt has proved a fiasco, and accumulating stocks towards the end of 1930 were depressing the market. In southeastern Europe, and especially in Roumania and Hungary, which depend largely upon grain exports, low prices and the unexpectedly heavy shipments of wheat from Southern Russia, are making financial and commercial conditions worse than usual—which is saying a good deal. The Sinaia Conference, which occurred in August, 1930, was an attempt by Roumania and Jugo-Slavia,

with Hungary as a third party, to bring about a better interchange of goods by fiscal arrangements; but these countries, being predominantly agricultural, have comparatively little to gain by freer trade.

The Warsaw Conference, which took place shortly afterwards, was a more ambitious attempt by nine mainly agricultural states, including Esthonia and Bulgaria (altogether representing a population of some ninety millions), to discover remedies for the present almost desperate state of agriculture all over Eastern Europe. What they most need, in the opinion of the Roumanian Minister of Commerce, are new outlets and cheap money to finance agricultural credits and agricultural exports. But London and other loan centres have had bitter experiences in Poland and Roumania; and there is little in the governments and policies of the Baltic and Balkan states at the present time to justify anything except continued mistrust. Resolutions passed at the Warsaw Conference favoured various forms of co-operation and "rationalization," and advocated a united front to compel the industrial nations of Europe to give preferential treatment to European cereals. Unfortunately, Germany is on the worst possible political terms with Poland, owing to its hot resentment against the Corridor and its losses of Silesian territory. Moreover, the German Government is so bent on protecting German grain and dairy produce from competition that it has encountered a severe boycott from the farmers of Holland and Denmark, who

have been endeavouring to compensate themselves for the loss of their neighboring market by increasing their trade with Great Britain.

French farmers, thanks to the traditional balance between agriculture and industry and the comparative prosperity of the country, were far better off, although the harvest of 1930 was less abundant than that of the previous year. In England wheat prices fell below even the average level of 1913; but the majority of British farmers buy more feeding stuffs than they sell. Consequently cheap grain and maize are, on the whole, advantageous to English agriculture as well as to the urban population.

In passing from Europe to the New World I would observe that, from the standpoint of the British investor, America and Australasia are far more important than Europe, though during the war, in supporting its Continental allies, Britain sacrificed practically all its Stock Exchange holdings in the United States. But Britain still has immense sums placed in Canada, Argentina, Brazil, Chile, Peru, and many other republics of Southern and Central America.

The misfortunes of Canadian wheat farmers, and the consequent impoverishment of the home market for Canadian manufactured goods, explain the success of the Canadian protectionists at the elections in the autumn of 1930 and the raising of the Canadian tariff at a most inopportune moment for the United Empire Crusade of Lord Beaverbrook. One

need not dwell on the situation of corn and cotton growers in the United States, nor on the painful predicament of an American farmer or fruit-grower who has to export his product to sell in the free competitive markets of England, while he has to buy his tools and clothing in a protected market. We may trace the industrial depression and the slump in many American industries partly to a decline in the buying power of farmers in the United States.

Passing by the less important republics of Central America, and Colombia, which are hard hit by the fall in coffee and other tropical or semi-tropical products, we come to Brazil, the largest, though not the richest, of the South American states. Those who believe in the dogma of the unfavourable balance of trade—holding that imports are disastrous and exports profitable; as if you could have one without the other—might cite British trade with Brazil as exceptionally lucrative and British trade with Argentina as extremely unsatisfactory. In 1928 Brazil imported from Britain goods to the value of over 19 millions sterling and its exports to Britain were valued at only $3\frac{1}{2}$ millions sterling. This seems extraordinary in view of the fact that the external debts of Brazil and its richest province, Sao Paulo, as well as several of the leading railways, are mainly held by British investors, and that the costly coffee valorization schemes have been financed by London. The explanation is that the national drink of Great Britain is tea, while the chief export of Brazil is

coffee; whereas the national drink of the U. S. A., Germany and France (which in 1928 took respectively about 44, 11 and 9 millions sterling worth of Brazil's exports) is coffee. The collapse in coffee prices has played havoc with Brazilian cultivators, and the country is also suffering from the slump in sugar and rubber. In spite of the recent valorization loan, the finances of Brazil and Sao Paulo at the close of 1930 were precarious and likely to remain so for some time to come.

British investors have also been a little nervous about Argentina, but rather on political than economic grounds. The peso exchange has been fluctuating, and the stability of the new *coup d'état* government is still uncertain. Argentina depends for its prosperity almost entirely upon its pastoral and agricultural exports, such as chilled beef, ox-hides, wool, sheepskins, maize and wheat. The low prices of wheat and maize and wool in 1930 hit farmers and pastoralists; but Argentina will easily survive these temporary losses. British investments in Argentine railways alone represent over £230,000,000 of British capital, and the investments of Britain in Argentina are said to amount altogether to well over 400 millions. The interest on this capital takes the form of exports to Britain which amounted in 1928 to 76 millions against only 31 millions of imports from Britain. Argentine newspapers have been pointing out that the "Empire Free Trade" policy of Lord Beaverbrook and the taxation or ex-

clusion of imports from Argentina would mean the reduction or cancellation of the dividends on London's Argentine investments!

In Peru, another country in which London is interested, conditions in 1930 were extremely bad owing to the fall in price of many Peruvian products and the collapse of the currency.

Until the slump of 1930, Australia was one of the best markets for British manufactures, taking over 60 millions annually of British goods. In 1930 over-borrowing and overexpenditure combined with the fall in wool brought about a financial collapse, which dislocated the exchanges and induced the Australian Government to lay embargoes and restrictions on imports. New Zealand and British South Africa suffered, but less severely, from the same causes. In the case of South Africa the appreciation of gold benefited the gold mines; and the dairy produce and mutton of New Zealand compensated to some extent for the losses on its cross-bred wools.

If I had to review the position in a sentence or two, I would say: The real economic mischiefs are, first, the barriers and restrictions which prevent exporting growers from finding the best market for their produce; and secondly, the obstinate refusal, in many cases, of retail prices to follow at a reasonable interval the downward course of wholesale prices. Of this I can give a remarkable example from conditions in the autumn of 1930. Among my friends are a sisal grower and a farmer. The sisal

grower is losing heavily because he can now only sell the products of his Kenya plantation at the ruinous price of about £20 per ton, whereas a year ago he was selling at over £40 a ton and making a fair profit. My farmer friend complains that binding twine made out of sisal hemp, still costs him £60 a ton, as it did last year, owing to a close ring of manufacturers and merchants who hold up the price. Is it not obvious that the cure for a slump lies in the consumer getting the benefit and so increasing his purchases? Here I think we have one of the causes which have been preventing a recovery in the world's business.

Those who believe that governmental interference in industry and governmental efforts to suspend the operation of economic laws are almost always, in the long run, unsuccessful and detrimental to the general interest, will have noted with philosophic complacency the series of failures which, in recent years, have attended attempts in various countries to regulate the prices of certain commodities—usually to bring about an artificial rise or to prevent a natural fall. They will have noted, too, how much easier the modern statesman finds it to prescribe the right economic policy for another country than for his own. When the cleverly foolish Stevenson rubber scheme was projected and carried out in British Malaya, President Hoover, then Secretary of Commerce, denounced it in a speech which laid him open to the retort that artificial monopolies, sustained by high

tariff rates, abounded in his own country. The economic lessons which should have been learnt from the rubber restriction scheme are now being taught by bitter experience to the United States and other countries. Thus Washington has been relying upon the Farm Board to save the great agricultural interests of the Middle West and of the Southern states from disaster. But the Farm Board's recent attempts to bolster up the price of cotton and the price of wheat, while costly to the taxpayers, have proved of little or no benefit to the farmers themselves. The dams constructed at considerable expense burst in January and February, 1930, when both cotton and wheat fell heavily in the markets of the world. As the *Commercial and Financial Chronicle* of New York put it in February, a renewed depression was then developing in the agricultural sections of the United States, "despite the efforts of the Government at Washington to prevent it and perhaps because of them." The drop¹ occurred, as the *Chronicle* reminded its readers, "notwithstanding that the Federal Farm Board on October 21, 1929, when spot cotton in this market was selling at above 18 cents, announced that it considered the price too low." The statement of the Board began:

In order to assist cotton farmers to hold back their crops and at the same time have money with which to pay their obligations, the Board proposes to lend to cotton co-opera-

¹ Middling cotton fell below 14 cents in February, and ruled at from 10 to 11 cents in the latter part of November, 1930.

118 WALL STREET AND LOMBARD STREET

tives qualified as borrowers under the Capper-Volstead Act sums sufficient to bring the total amount borrowed from all sources by such associations to 16 cents per lb.

Here we have a distinct admission that a branch of the administration was lending public money to cotton growers for the express purpose of holding back their crop and so holding up the price of cotton. This policy accounted for the unwillingness of the ordinary purchasers of cotton to buy at a market price which they knew was being rigged. Naturally they turned to other kinds of cotton which might serve as substitutes for American.

On October 26th, 1929, the Board offered similar loans to wheat co-operatives "in order to assist wheat-farmers to hold back their crops and at the same time have money with which to pay their obligations." The following paragraph, it will be admitted, showed a remarkable amount of confidence in the stability of the market:

The Board is confident that, considering the soundness of underlying conditions which affect the price of wheat, the plan described above furnishes a completely safe basis for making loans from the Board's revolving funds. The Board places no limit on the amount of Government money to be so loaned. Nearly one hundred million dollars is available for the purpose, and if necessary the Board will also ask Congress to appropriate more.

The cotton and wheat markets went to pieces; and the unfortunate growers, who borrowed from the

Farm Board in order to keep back their cotton and wheat for higher prices later in the year, found that prices were getting rapidly worse instead of better, while competing farmers in other countries benefited at the expense of American taxpayers. "As an American critic put it, "in effect, we are holding the bag for our neighbours"—just as the expenditure of Brazil on coffee valorization benefited coffee growers in other countries, until overproduction and underconsumption brought about a financial collapse in Brazil; and just as the British rubber restriction scheme (called after Stevenson, its inventor) proved highly profitable for a time to the Dutch rubber planters, who enjoyed the benefits, without suffering the disadvantages, of restriction. It is true that in the case of Brazil the valorization policy was apparently a success for a number of years; but when the collapse came it was all the more disastrous; for the price of No. 7 Rio coffee in December, 1929, dropped as low as 9 cents per pound, as compared with over 18 cents in the previous February.

Another example of a futile attempt to prop up prices, instead of allowing a glut to be absorbed, is provided by wool. If the Australasian clip had been sold freely for what it would fetch at the wool sales in London, Australia and New Zealand, the situation in 1930 (with a smaller carry-over) would have been much more wholesome, and more wool would have been going into consumption. As things stood all through 1930—to quote a market report from Brad-

ford—wool merchants and manufacturers were “content to carry as light stocks as possible in face of the measures taken for holding up the raw material.”

Other illustrations might be given from copper and tin of efforts to maintain or raise prices by restricting output. In 1930 the copper combine in America broke down, and the price relapsed heavily.

In this chapter the case against artificial restriction has been stated from the standpoint of growers and producers; but that of the consumer is equally relevant and equally important. Indeed, it is arguable that governments should, almost invariably, take care of the consumer and let the producer take care of himself. From the standpoint of the community, what is needed is a stable currency, with prices in each commodity regulated by the law of supply and demand in a free market.

After this survey of the effect of the collapse in food and raw materials, it will be well to apply the measuring rod of index numbers. Those who doubt the influence of the Wall Street collapse on commodity markets will find it difficult to resist the statistical argument, which shows that the fall in prices was comparatively moderate and gradual until the autumn of 1929. Thus the index number for all commodities of the American Bureau of Labour, starting with 100 for 1926, had fallen less than four points in October, 1929, when it stood at 96.3. But during the next year, in spite of the raising of the tariff, there was a fall of nearly 14 points, the

figure for October, 1930, being 82.6. Foods fell about 13 points, farm products 21 points, textile products 19 points, and metals 13 points.

If we turn to the *Economist* index number for wholesale commodity prices, we can compare the position on November 30, 1930, with that on November 30, 1929. In this case the general figure for all commodities, weighted according to their importance, declined from 126.9 at the end of November, 1929, to 101.9 at the end of November, 1930. The basic figure of 100 represents the average level of prices in 1913, so that the purchasing power of gold in England, the biggest free market in the world, was only two per cent higher in November, 1930, than in the year before the war. Turning from the general to particulars, the figures of the *Economist* show that between the end of November, 1929, and the same date in 1930 American raw cotton fell about 39 per cent, Australian wool 31, silk 43, jute 39, flax 33, and hemp 32 per cent. Tin dropped 36 per cent, copper 31, spelter 27 and lead 23 per cent. Among staple foods, wheat and maize fell 46 and 37 per cent respectively; bacon declined 32 per cent, butter 31 per cent and cheese 22 per cent. Among foods unaffected by American demand and supply, English potatoes rose 50 per cent and English mutton 10 per cent. Tea, the national drink of Great Britain, rose 11 per cent, while coffee, the national drink of the United States, fell 21 per cent. According to the

Economist, British manufacturing production in the third quarter of 1930 was only $5\frac{1}{2}$ per cent lower than in the third quarter of 1928, whereas the decline of American production was estimated at 20 per cent. The above figures confirm my view, not only that the world crisis was started, or precipitated, by the Wall Street collapse, but that the United States and the countries which supplied it with raw material had the largest share of the suffering.

CHAPTER IV

SPECULATION IN THEORY AND PRACTICE

Mr. Nickleby looked about him for means of repairing his capital, now sadly reduced by this increase in his family, and the expenses of their education.

"Speculate with it," said Mrs. Nickleby.

"Spec-u-late, my dear," said Mr. Nickleby, as though in doubt.

"Why not?" said Mrs. Nickleby.

"Because, my dear, if we *should* lose it," rejoined Mr. Nickleby . . . "if we should lose it, we shall no longer be able to live, my dear."

"Fiddle," said Mrs. Nickleby.

"I am not altogether sure of that, my dear," said Mr. Nickleby.

"Think of your brother! Would he be what he is if he hadn't speculated?"

"That's true," replied Mr. Nickleby. "Very good, my dear. Yes, I *will* speculate."

Speculation is a round game; the players see little or nothing of their cards at first starting; gains *may* be great—and so may losses. The run of luck went against Mr. Nickleby. A mania prevailed, a bubble burst, four stock-brokers took villa residences at Florence, four hundred nobodies were ruined, and among them Mr. Nickleby.

—*Dickens: Nicholas Nickleby.*

ADAM SMITH, in the *Wealth of Nations*, speaks of a "certain propensity of human nature," the propensity to barter. Another is, I think, the propensity

to speculate. Speculation may be a virtue or a vice, a source of success or failure, according to men and circumstances. It is allied to that spirit of adventure, often stimulated and financed by speculators, which long ago sent out sea-faring Englishmen to colonize the New World and to develop commercial empires in the Far East. We may deplore the gambling passion and the love of hazard and risk which have been responsible for the loss of so many lives and so many fortunes; but it is difficult, and I think it would be wrong, to denounce as a mere vice or folly the spirit that created and still encourages pioneers, explorers and merchant venturers in all parts of the world. For speculation in the best sense is an investment of money, or an application of credit, to finance enterprises which promise handsome profits. But for a verdant and evergreen faith (as I once put it) salted with the love of risk and adventure for their own sakes, how could mountains be bored and waters bridged and the air spanned? If there were not superstition there could be no religion; if there were no bad speculations there would be fewer good investments; if there were no wild ventures there would be no brilliantly successful enterprises.

(Speculation is as old as history. In a sense the "propensity to speculate" must have preceded the "propensity to barter"; for as soon as a man produced more of any commodity than he could himself consume, he was catering in advance for the wants of others and so assuming the risks of providing for an

unknown and uncertain demand. When the time came for a "swap," he might find nobody who wanted his superfluous supply of arrowheads or deerskins; but, on the other hand, these articles might be in great demand and exchange for more meat or fish than ever before. Any "carrying of stocks" is essentially speculative and hazardous. Nor was the process of making a corner unknown in early history. Thales of Miletus, in anticipation of an abundant olive harvest, made a fortune by buying up all the oil presses and letting them out on his own terms. Aristotle tells, too, of a Sicilian who cornered all the iron in the island and made a profit of 200 per cent on its sale. In Athens there were many speculators who lent on the security of ships and their cargoes, getting from 25 to 30 per cent if the voyage prospered, but losing their money if the ship foundered at sea. A law had to be passed, as we know from a speech of Lysias (450-380 B.C.), forbidding corn factors to buy more than 50 phormi at a time. Similar laws and regulations have abounded in mediæval and modern societies. In Russia, during April, 1930, four officials of the Soviet Bread Trust in Ukraine were sentenced to death and thirty others to imprisonment on a charge of having speculated in government corn.

All through history, the perils of the sea and undiscovered Eldorados have lured men on to ruin or fortune. Antonio in the *Merchant of Venice* had "ventures squandered abroad." Our Merchant Ven-

turers of Henry the Seventh's reign and the spacious times of great Elizabeth were praised because their speculations enured to the benefit of the community. Bacon tells us that they "prevented distress and discontent among the artisans by taking up the commodities of the kingdom, though they lay dead upon their hands for want of vent."

In modern times the first famous speculative mania took place in Holland early in the seventeenth century, during a prosperous period of Dutch history, when all the conditions for "bullish optimism" were present. Tulips were first imported into the Netherlands towards the end of the sixteenth century. Their scarcity and the beauty of their colouring made them very valuable, and high prices were paid for them from the first. Their culture spread rapidly, and a brisk trade in bulbs was carried on. Business soon extended to so-called "future bulbs" (the excrescences which were still attached to the mother bulb), so that bulbs could be bought and sold the whole year round, instead of only during the summer. This immensely increased the speculative possibilities of the trade; and whereas until the middle of 1634 operations had been limited to growers and connoisseurs, by the autumn of that year the outside public was joining in and a wild speculation began. By 1636,¹ the trade in futures

¹ I am quoting from N. W. Posthumus's exhaustive article on "The Tulip Mania in Holland," from the *Journal of Economic and Business History*, May, 1929.

"had degenerated into purest gamble, the seller selling bulbs he did not have against a counter value, mostly money at this period, which the buyer did not possess. Each succeeding buyer tried to sell his ware for higher prices; and in the general excitement any one could make a profit—at least on paper—of several thousand florins in a few days." These absurdly high prices spread the craze. "Colleges" grew up, where buyers and sellers could meet, and a rough set of rules was applied to the proceedings of most of these institutions. Neither the real tulip amateurs nor the big merchants took much part in this speculative mania, which was confined mainly to the middle and lower classes. The weavers, in particular, it appears, were heavily involved.

As usual, the crisis, when it came, took the crowd by surprise. On February 1, 1637, buying was still brisk. Stagnation set in on the 2nd or 3rd, and by the 4th the possibility of the bulbs becoming unsalable was generally recognized. Government intervened, not very successfully, to compose the turmoil; and a committee was formed to settle the claims of buyers and sellers. There were, of course, considerable economic losses and a certain displacement of wealth; but for many, as Professor Posthumus observes, "there was no loss at all; they had sold what they did not possess to someone who lacked the means of paying them; these sales were all annulled."

Our main interest in the Tulip speculation lies in its resemblance to modern booms and panics. "The

conditions now generally associated with the first period of a boom were all present. An increasing currency, new economic and colonial possibilities, and a keen energetic class of merchants, together had created the optimistic atmosphere in which booms are said to grow." It was easy to buy and cultivate the bulbs, and this helped to spread the mania through an ignorant populace, just as the simplicity of investing in stocks and shares and the familiarity of the subject, engendered by newspapers and the "ticker," spread the speculative mania throughout the United States before the crisis of 1929. And further, just as in a modern boom, all sense of intrinsic value of the gambling counters was lost. The "tulipomania" of the seventeenth century in Holland was only a form of gambling, in which admiration of the flower itself and interest in its culture were quite secondary matters; indeed, they probably carried no weight at all with the vast majority of buyers and sellers. The fact, too, that the bulbs were, so to speak, standardized—that is to say, contracts were usually for a thousand bulbs or for a certain weight of bulbs and not for any one particular bulb—facilitated speculation, on the same principle that cotton, wheat and other commodities in which future trading is carried on are graded nowadays. It is this same quality of "representativeness" which has made speculation in stocks and shares so much more general than in any other article.

Stock jobbing, or dealing in stocks and shares,

took root in London after 1694, when the foundation of the Bank of England helped to promote a less desirable sister institution, the National Debt. By 1710 or 1711, Britain's funded debt had grown to eleven millions and the unfunded debt to nine millions. With so much government paper about, it was natural that there should be a certain amount of buying by the outside public. The early issues of the Bank of England were fully subscribed, and, in 1709, when its capital was doubled, the whole of the new stock, over two millions—was issued at a premium of 15 per cent and subscribed in four hours. The funded debt, which amounted in 1711 to £11,750,000, was all held by public investors in the form of annuities, bank stock, East India stock, etc., at various rates of interest.

When, therefore, a proposal was made in 1710 that the South Sea Company should take over the unfunded Debt, in return for trading privileges, and when, in 1720, under Sir John Blunt it offered to take over the whole of the National Debt in return for certain Government guarantees, public interest began to be excited. The company's offer was accepted by the Government; some very favourable rumours were opportunely circulated; and the first subscription, which opened at £300 for £100 stock, was closed in a few hours. A second and a third subscription were eagerly swallowed by the public, lured on by promises of more and more prodigious dividends. The City of London—and indeed the whole

country—went mad. Not only did the stock of the South Sea Company itself rise to extravagant figures, but in the feverish passion for unearned gains all sorts of minor bubble companies were floated and their shares snapped up, regardless of their real value, present or prospective. The whole nation was intoxicated. From the highest to the lowest, all who had money to spare joined in the gamble, hoping to double, treble and even to increase a hundredfold the value of their capital, tempted by the promises of the promoters. The third issue of the South Sea stock touched £2,000 for £100, and then it began to fall. In the course of a month or less it had dropped to £150. "The ebb of this portentous tide was so violent that it bore down everything in its way; and an immense number of families were overwhelmed with ruin."¹

So closed the first great speculative mania in English history.

But in moralizing over the ruinous consequences of a great stock exchange disaster, one must beware of indulging in mere abuse and denunciation of the speculative habit. Speculation, in the sense of taking risks, is essential to progress. Adam Smith, himself, acknowledged that speculators "have been useful for the first introduction of some branches of commerce, by making, at their own expense, an experiment which the State might not think it prudent to make.")

An excellent, though little known work on specu-

¹ See Smollett's *History of England*, Vol. II, Chapter II.

lation by an American professor, Henry Crosby Emery,² made out (in 1896) a good, or at any rate a plausible, case for thinking that, on the whole, speculation has been beneficial to mankind. "Speculation in the last half century," he wrote, "has developed as a natural economic institution in response to the new conditions of industry and commerce." In his opinion the main importance of speculation is that it makes prices. "Wide as is the influence of speculation, its force is felt primarily in the field of prices. By making prices it directs industry and trade; for men produce and exchange according to comparative prices." Professor Alfred Marshall put it in another way when he said, "A speculator, who, without manipulating prices by false intelligence or otherwise, anticipates the future accurately and who makes his gains by shrewd purchases and sales on the stock exchange, or in the produce markets, generally renders a public service by pushing forward production where it is wanted and repressing it where it is not."

There is, of course, a large element of speculation in all trading. Goods are bought when or where they are cheap, and sold when or where they are dear. Modern improved methods of communication tend to lessen the differences in price as between markets in different parts of the world, so that the speculator of to-day takes advantage more often of variations

² *Speculation on the Stock and Produce Exchanges of the United States* by H. C. Emery, New York, 1896.

in price between different times rather than between different places. Speculation consists to a large extent in anticipating movements of supply and demand.

An element of futurity must necessarily enter largely into every speculative transaction. As Emery reminds us, it is a mistake to associate "spot" dealings with "actual business" and "futures" with speculation. Spot dealings may be purely speculative, as where a person buys and sells in order to profit by daily fluctuations in the spot market, or buys "spot stuff" outright to hold for a rise, or finally makes cash purchases to settle future contracts previously made. Of course, a speculative demand and supply is just as real as any other. An existing market for future goods is an attempt to forecast a future market for (then) existing goods. The speculator, in bidding for the future price, tries to imagine what the spot price will be on the given date. The degree of accuracy with which such an estimate can be made is, in a sense, a criterion of the utility of speculation.

In anticipating an *actual* demand, the speculator is rendering a service to the community; for when he buys a commodity in advance, he is helping to make a market for producers who cannot afford to wait. The speculator, by helping to make a market, stimulates or checks consumption ahead of the change in supply or demand, and in this way the violence of price fluctuations may be lessened. In the same way, if a shortage of some commodity is indicated, prices rise

in advance, and a long period of moderately high prices is substituted—thanks to speculation—for a short period of famine prices. Consumption, in fact, tends to be equalised over a longer period.'

Since successful speculation depends on an accurate estimate of the future, everything that helps to make this estimate more reliable will be a step forward in the development of business in futures. During the last half-century, the machinery of prediction has developed with amazing rapidity along with the machinery of speculation. In a vast business like cotton, where speculation plays so great a part in almost every stage from the planter to the merchant, the machinery of prediction is a complicated and delicate affair. Every hour of the day crop reports come in from America, from Egypt, from India, by cable, wireless or telephone. Every event which might have any bearing upon the coming crop—rain or drought or civil war or a mischievous plague of insects or often some apparently trivial occurrence—is instantly reported and instantly acted upon. Mr. H. V. Morton, in his book, *The Call of England*, gives a vivid and amusing up-to-date impression of the Liverpool Cotton Exchange:

"I seemed," he writes, "to be in a luxurious asylum. A hundred men, some bare-headed, some wearing hats, stood outside a wide circular rail set up in the centre of the great hall. They were shouting at each other and making urgent gestures. It seemed to my puzzled and ignorant eye that they were ordering drinks from an invisible barman. The

centre of the ring, at that moment vacant, seemed to lack a man in a white shell jacket with a cocktail shaker.

They crowded shoulder to shoulder, shouting, flinging up their arms, making signs with their fingers, the resultant noise a deep masculine babel from which it was not possible to tell whether they wanted dry martinis or whisky and soda.

The same gestures, the same time-driven anxiety, the same quick glances at the clock are seen in certain north country bars at closing time every Saturday night.

I took my friend firmly by the shoulders and shouted into his ear:

"Is it a revolution or do they only want the manager?"

"No," he managed to tell me, "they are buying cotton!"

"How do they know?" I asked him, but this he could not, or would not, answer.

The ring was the "Cotton futures" ring. The cotton—or much of it—which was causing so much excitement was, Mr. Morton gathered, not yet grown! They were buying cotton as far as twelve months ahead. New York was egging them on, sending them encouraging or discouraging messages every few seconds, while the only calm person present, a little tow-haired boy, put up the prices on a great black screen, which resembled in its mathematical obfuscation a senior wrangler's idea of a pleasant Sunday afternoon.

There was a smaller ring near at hand, but the storm did not touch it. It looked like a bit of the Hyde Park rails at lunch-time; two men were leaning on it casually and chatting.

"Egyptian cotton!" shouted my friend. "Not much doing."

There was an even smaller ring, uninhabited.

"Empire cotton!" shouted my friend. It had evidently all been sold.

The whole drama was concentrated round the American ring. Cable Company boys, wearing peaked red caps, came in chewing toffee, unconscious of their importance as slaves of that god of commerce, the Atlantic cable, and men sat in little areas of detachment manipulating telewriters or quietly adding to the mathematical obscurity of that important blackboard which held the secret of cotton prices for twelve months ahead.

As I looked down on the Cotton Ring, trying to find out how it worked, I became aware that its violence was fitful. It was a moody riot. It blew hot and cold. Now it would be cold and suddenly silent—but watchful—then it would in a second blaze up so that every man seemed to be shouting down the other fellow. I noticed that it responded to men lurking on the outskirts, who received cables and telegrams from time to time; messages which they read quickly and furtively; messages telling them to sell or buy. They would then enter the ring and get busy, and the ring would react at once.

When a sharp spurt was dying down I heard voices crying:

"I'll sell five June!"

"I'll buy five at seventy-one!"

My friend shouted to me:

"It's really like an auction among friends!"

I patted his arm sympathetically and tried to appear convinced.

I went back to an importer's office. I sat down impressed by the Cotton Ring. A senior partner opened the door an inch and said rapidly:

"It's dropped since five!"

The whole cotton trade seems to be conducted in these short, cryptic sentences.

The senior partner came in again, quickly, excitedly, reeled off some more figures, and went back to his listening post, and I realised that the shouting men at the Futures Ring were not a badly conducted riot; they formed an astonishing nerve centre, a queer, intricate, delicate bunch of nerves created by years of trading, nerves linking New York with hundreds of Liverpool offices.

"Up two points since three!" said the face of the senior partner between the opening and the slamming of the door.

And in hundreds of offices where they buy ungrown cotton the same nervous tension was, I suppose, felt as men followed the moods of the market minute by minute. . . .

I walked out, still puzzled, but vaguely glad to know that the price of a cotton vest was fixed for April next year!

Modern methods tend to blur the distinction between early information and foresight, which are the acquisitions or characteristics of the successful speculator. Speculation has been described as the struggle of well-equipped intelligence against the rude power of chance. The easiest way to weather the ups and downs of chance is to foresee them and provide accordingly. Hence the tendency of a modern bourse or stock exchange is to "discount events" and thus minimize their effect when they occur. Events which would once have caused consternation and havoc on the exchanges, now hardly affect prices; for they have been anticipated and due allowance made for their effects, good or bad.

{ Of course, there are certain risks which it is not humanly possible to foresee, and that is why so many people are inclined to regard speculation as just an-

other form of gambling. It is, indeed, very hard to make a watertight definition of speculation which would exclude betting and gambling; but if we follow Emery and confine its meaning to the operations of the exchanges, then we can distinguish them by saying that speculation always involves possession of the thing in which you speculate, though that possession may be fleeting or ephemeral.

Many other distinctions might be drawn. In gambling, for instance, one party loses what the other gains, whereas in speculation every party may gain. Take speculation in wheat, in which the farmer, the speculative purchasers (of whom there may be several), and the miller all play a part. If there has been an actual increase in the market value of wheat over a period, each of these parties may in turn gain on the transaction. Emery makes the further distinction that, while gambling and speculation both depend on uncertainties, gambling consists in placing money on artificially created risks of some fortuitous event, whereas speculation consists in assuming the inevitable economic risks of changes in value.

Speculation, then, in its price-making and its risk-bearing functions seems to be essential to modern industry and trade. But it may, and often does, bring grave evils in its train. Whereas it is a function of legitimate speculation to extend the length and diminish the height of price waves, it is obviously to the interest of an individual speculator that violent fluctuations should persist and multiply and augment;

and to this end all sorts of devices have been employed. The manipulator of stocks has many resources at his command. He may spread false information, corner stocks, arrange "wash sales," or in countless other ways seek to turn the market to his own advantage. As Professor Hadley points out, a manipulator of stocks is a greater danger to the community than the man who cheats at cards or "pulls" a horse; for those who suffer at the card table or on the turf are acting with their eyes open, whereas juggling and dishonesty on the exchanges may inflict direct harm on both producers and consumers and indirect harm on business methods and morals.

But perhaps it is not fair to bring against speculative activity arguments which more properly apply to its perversions. Those who have studied the matter realize that there are certain evils inherent in speculation itself. A gambling spirit is fostered at the expense of industry. A lowering of the moral standard injures all trade relations. Instability of fortunes discourages perseverance and economy.

(Professor Henry Clay denounces as illegitimate and wrong three forms of speculative activity—(1) speculation by the outsider, (2) dealing on insufficient capital, and (3) producing artificial price fluctuations which cannot assist in adjusting supply to demand. I have already touched on the last of these abuses. The two first remain to be considered in the light of recent experience. It has already been seen

that unless speculation is justified by foresight, it is apt to do more harm than good. It should, therefore, be confined to specialists with a knowledge of the market, whose estimates stand some chance of being fulfilled. When a credulous and ignorant public rushes into the market and (as happened with such disastrous consequences in the United States in 1928 and 1929) over-trading is carried to an absurd extent, the tendency is not to minimize fluctuations in price but to accentuate them. Where so many are "margined" to the full extent of their available capital, any sudden movement in price may threaten their solvency and drive them to cover or liquidate. Hence prices, after rising during a boom, collapse suddenly in a panic.

Emery argues that periods of inflation and panic cannot be attributed solely to speculation. "In the case of stocks, the speculative mania is almost universally a result of new industrial conditions." Companies are formed regardless of their chances of success, and speculative activity in the stock markets *follows after* a speculative increase of securities. Nevertheless, it cannot be denied that the exchanges and indeed the whole credit system afford facilities for increasing the inflation once it is begun, by making purchasing easier. As Giffen remarked, "gambling is in no case possible without credit, and where there is credit, while human nature remains as it is, there will always be undue credit." Nor did Emery appreciate the influence of gold accumulations

or of an inflated paper currency on the manufacture of Stock Exchange credit.

A recent illustration of the world-wide attempts to manipulate commodity prices in the interests of producers, or, in the favourite language of to-day, to stabilize prices—i.e., to raise them above the market level—may be drawn from a Commercial Supplement of the *Japan Weekly Chronicle*, dated October 9, 1930. The forecast of an unexpectedly good rice crop made by the Department of Agriculture on the 2nd of October, and a similar forecast of the rice crop in Korea by the Governor of that province,¹ caused such a panic on the Japanese rice exchanges that these institutions had to be closed "in order to enable the brokers to recover their self-control." In an explanatory note on this panic among the brokers, the *Chronicle* wrote:

Rice Exchanges are dumbfounded at the above sharp increases expected in the crops. Originally operators forecast crops at 63,000,000 koku in Japan and 17,000,000 in Korea, and later they stretched these figures by 1,000,000 for each. No one dreamed that the crops would record an increase of 12,900,000 in the total of both Japan and Korea. Dealers in the market fear that as the crop movement reaches its height and the year-end settlement approaches, sacrifice sales will be made in rapid succession. They expect, however, the Government will come to the rescue by taking some measures to counteract the situation. An application of the Rice

¹ Over 66 million koku for Japan, an increase of over 7 million on the average of the last 5 years, and over 19 million koku for Korea, an increase of 40 per cent over that of 1929.

Law, as has been tried in the past, is considered to be of little use to check the adverse trend of prices. What will be the bottom? At the present rate, it is quite probable that quotations will decline to the level of 15 yen. After the official forecasts were made, spot quotations ruled 50 sen lower and the market was filled with the noise of bears.

The question what are reasonable or unreasonable prices, and what should be the basic price were to be dealt with by an amendment of the Rice Law, which was being discussed by the Prime Minister with the Executive Committee of the Rice Enquiry Commission, a draft plan having been prepared by the Department of Agriculture. The plan was to establish certain bases for determining prices as unreasonably high or low in connection with the application of the Rice Law.

The maximum is to be taken at an average cost of living, or in detail, the amount of rice purchased, together with other foodstuffs, by a household with a monthly income of below 100 yen based on the index number to be published by the Bureau of Statistics and the Department of Commerce and Industry. The minimum is to be taken at an average cost of production per koku of the peasant proprietors, tenant farmers and those working on both their own farms and as tenants, based on investigations by the Department of Agriculture and Forestry. There will always be left a margin of at least 20 per cent between prices and the above maximum and minimum limits; and if the margin is broken, the Rice Law will be applied, that is to say, either sales or purchases, as the case may be, will be made by the Government.

Meanwhile, the Government of Korea had published its policy "to counteract the situation," the main points being as follows:

1. Control of the supply by withholding 3,000,000 koku from the market unhulled.

2. Establishment of rice warehouses to be expedited, and the Agricultural Societies, Rice Associations, etc., to be induced to undertake warehousing and to give monetary accommodations to farmers.

3. Assistance to be given to farmers in raising funds.

4. Farmers to be urged to maintain their selling prices on a certain uniform basis.

5. Strict supervision to be made in seasoning, etc., of the unhulled rice to be withheld from the market.

What happened on the exchanges deserves to be narrated:

All night on the 3rd instant the managements of the Rice Exchanges in Tokyo, Osaka and elsewhere were making desperate efforts towards compromises between bears and bulls so that the markets could be opened on the following morning. This, however, was considered a very hard task, because there were outstanding transactions amounting to over 1,000,000 koku in the Tokyo exchange and 2,000,000 koku in the Osaka exchange. Compromises made from the 2nd to the 3rd reached only 300,000 koku in total, but the quantity was too small to relieve the market from chaos.

On the morning of October 3rd the committee of the Tokyo Exchange met and resolved to make every effort to induce operators to make a compro-

mise. The matter was referred to the extra-general meeting held on the same afternoon, and as soon as the plan was approved, the management of the Exchange launched a vigorous campaign to attain its object. Basic prices for the compromise were fixed at 17.69 yen for October, 16.62 yen for November and 16.01 for December, all showing a decrease of 40 sen from the closing quotations on the previous day. By 9 P.M. the majority of operators agreed to the compromise on these basic prices, but there were still a few who were strongly opposed to the plan.

On the Osaka Exchange, a special committee was formed to consider the furtherance of compromises, the stabilization of the market, etc. The committee approached Mr. Yoshimura, a "bear king," who was said to have an interest of over 340,000 koku in both the Osaka and the Kobe Exchanges. Mr. Yoshimura first declined the suggestion for several reasons, the most important being that they had already compromised to the extent of 91,000 koku on the previous night. He graciously agreed, however, later on to compromise a further 10,000 koku each of October and November deliveries at a compensation of 1 yen and 80 sen, respectively. Three other bears agreed to unload 25,000 koku in all. Thus 45,000 koku of rice were procured; yet this was insufficient, because bulls were asking for deliveries of 150,000 koku. These difficulties were eventually overcome by the efforts of the committee.

While the Japanese Government was anxiously

conferring with exchanges, banks, merchants and growers to standardize or stabilize the prices of rice and silk, various proposals were being put forward in the United States for prohibiting or severely restricting speculation, and especially bear selling, on the stock markets and commodity exchanges.¹ In view of the losses caused by the collapse in stocks, metals, grains, cotton, and other commodities, not only to investors, speculators and bankers, but to the farming community and miners, it is not surprising that politicians, and especially those representing agricultural constituencies in the Middle West and South, were continually seeking to divert attention from the failures of Congress and of the Farm Board by throwing blame on the exchanges and pretending that the collapse in prices was due, not to political, economic or financial causes of world-wide scope and significance, but to the professional operations of domestic speculators for a fall. When a rapid increase of production or a sharp fall in consumption takes place, markets must fall and far-sighted operators, anticipating a fall, are sure to take advantage of any facilities that exist to sell in advance. Thus a member of the Chicago Exchange in March, who expects a fall in wheat, may sell a hundred thousand bushels of May wheat (which he does not own) at (say) 70 cents a bushel. He makes his sale first and looks forward

¹ When Congress reconvened on December 1st, 1930, it had before it the Cawthorne and other bills seeking either to emasculate the functions of the exchanges or to abolish them entirely.

to making his purchases and profit later, when prices have fallen.¹

But the existing organizations for trading in grain, cotton and other commodities have grown up out of experience and are founded upon utility. To quote the *Financial Chronicle*, "crops whose total valuations run into the billions cannot be moved and marketed without intricate business machinery, in which hedging operations form a most important part." Bankers, brokers and discount houses help the American farmer to get prompt money for his crops and to distribute surplus produce to consumers in the United States and Europe. But speculation in future contracts for the delivery of cotton, grain, etc., is also helpful and almost indispensable under modern conditions; for it provides a daily market with close quotations for present and future goods, and it provides also the necessary hedging facilities, or price insurances, which enable shipping and merchant houses to buy freely and safely and so to move crops from the farm to the warehouses and stores and consuming centres. It is natural, but absurd, for sellers or holders of shares and commodities to make believe that bulls are the benefactors and bears the malefactors of mankind. Both may do temporary harm by exaggerating a natural movement or by promoting a squeeze or corner. But, as a rule, they play a useful part; and this is especially true of specula-

¹ For a detailed account of this type of transaction see Emery, pp. 54-57.

tive short selling; for it checks excesses during a boom and often steadies a declining market by maintaining its technical equilibrium.

In the autumn of 1930, the United States Chamber of Commerce referred vital questions, concerning the utility of commodity exchanges, to its member organizations, which by overwhelming majorities affirmed the three following propositions:

1. That commodity exchange trading should be supported.
2. That trading in futures on commodity exchanges should be supported.
3. That intelligently and wisely regulated speculative buying and selling on commodity exchanges should be supported as a necessary factor in the economic distribution of agricultural products.

At the same time, quite properly, the Chambers of Commerce added a fourth recommendation: That commodity exchanges should adopt such changes in their rules and regulations as will not only promote the interests of the producer, the merchant, and manufacturer of agricultural commodities, but also the general welfare of the public.

It is not unsatisfactory that, at a time when the most speculative nation in the world was smarting under the economic lash, that its leading commercial body should have ranged itself on the side of scientific opinion, by endorsing the view that commodity exchanges are essential to the marketing of agricultural products.

CHAPTER V

CAUSES AND REMEDIES

NOTHING is more difficult in social and economic investigations than to discover the true causation of the maladies which from time to time affect nations and communities separately or simultaneously. Once the surrounding circumstances have been investigated and the true causation of events has been established, there is at least some probability that appropriate remedies—whether they involve action by governments or abstention from action—will come to light, and a remote chance that they will be approved by public opinion and endorsed by rulers. The great boom and slump on the New York Stock Exchange in 1929, and the universal trade depression (associated, rightly or wrongly, with the collapse in commodity prices) will probably be used by future historians and economists to illustrate the utility or futility alike of economic research and government action. But I am well aware that my own necessarily brief analysis of the causes and remedies may be, and probably will be, disputed at almost every step by some economist or publicist.

One must always remember that men's minds are

apt to be overimpressed by the sequence of events in assigning causes, and consequently in propounding remedies. "Post hoc ergo propter hoc" is the commonest of human fallacies, and many examples could be furnished from the present situation at the time (December, 1930) when I happen to be writing this chapter. One will be enough for my purpose. Free Traders argue—and their opinion is widely endorsed by the shipping and mercantile community all over the world—that the multiplication or raising of tariffs, by obstructing and dislocating international trade, is the principal cause, or a principal cause, of our present calamities, and of the unemployment which is distressing many great cities and industrial areas. In the United States the slump in business has naturally directed criticism against the very high tariff which was put into operation a few months ago, whereas in Great Britain and Holland, which are still to a very large extent Free Trade countries, protection and retaliation have come into fashion, and many people, both in business and politics, who were previously indifferent, have not only announced their conversion to protection but have suggested that the depression of trade in Great Britain and Holland could be wholly or partially removed by a tariff similar to those which in other countries are being denounced as responsible for the present discontents.

These preliminary observations would justify a discussion more extensive than the compass of this little work allows. But I shall ask my readers to

credit me with having weighed many considerations and arguments before drawing conclusions from a tangled and perplexing story. Let me begin with a concise survey of the facts. In the year preceding the Great War, the leading nations of the world were fairly prosperous, though they were carrying an already oppressive burden of competitive armaments. The Great War, commencing in 1914 and ending in 1918, destroyed many millions of precious lives and many thousand millions of capital. It reduced all the belligerent countries, except Great Britain and the United States (I omit Japan, which took but little part in the war) to bankruptcy. The recovery of the United States, which profited as a neutral during the first half of the war, was rapid. Its gold currency remained intact while that of its allies deteriorated. Indeed, Great Britain alone among the European allies was able to return to a gold basis without defrauding holders of the public debt, by so-called stabilization of currency.

After a short, feverish post-war boom came the inevitable slump, from which in 1922 and 1923 Europe began to recover slowly, while the United States went quickly ahead. The predominance and amazing expansion of the American motor-car industry gave an impetus to the iron and steel trade; and a business boom, with subsidiary land booms and building booms, was soon in evidence. In 1927 American speculators, seeing the growing profits of great industrial corporations and the rising revenue

of railways, were buying common stocks. In 1928 cool observers began to think that the discounting of future profits had gone far enough, and that the anticipations of capital appreciation were exaggerated. But the bulls were making paper fortunes, and their leaders announced that "a new era" had come, which relieved speculators of the need to remember old-time cautions. No limits, they said, could be set to the prosperity of the United States. And so the gamble went on. An ample supply of credit was available for marginal transactions, and literally millions of Americans got into the habit of borrowing from bankers and brokers in order to possess themselves of stocks which they felt sure would rise. Generous extensions of credit seemed to have a technical justification in the eyes of those who held that gold rather than confidence is its basis.

An immense amount of gold had accumulated in the United States since the war, partly because the American Government claimed—and succeeded in enforcing its full claim on Great Britain—that the subsidies of food, munitions and raw materials, which had been shipped and lent to the allies in the later stages of the war at the high war prices then ruling, should be repaid in gold, without regard to the fall in prices and without any provision for the acceptance of payment in untaxed goods. In this way, the United States was attracting far more than its share of the world's gold stock, and the existence of more gold than could be used for the purposes of legiti-

mate trade made it easier for bankers in the United States to extend credit unduly to their speculative customers. At the same time, this superabundance of the precious metal encouraged large foreign issues in New York; and for some years the United States was lending so much capital to Germany that Germany was able with comparative ease to shoulder the enormous burden of Reparations. Moreover, in the last year of the boom there sprang up mushroom Investment Trusts and bogus companies innumerable, into which multitudes of Americans poured their hard-earned savings or quickly won profits as down a sink.

When the crash came in Wall Street, all this was changed. Calculations have been made that the fall in American Stock Exchange securities from the highest to the lowest point, in 1929 and 1930, amounted on paper to anything from 6 to 8 thousand million pounds sterling, which is something like the equivalent of the whole war debt of Great Britain. It is true that the fortunes gained should be deducted from the fortunes lost. But a large slice of the gains was eaten up by brokers' commission agents. Besides, money made during a boom promotes extravagance, and there was not very much to show for it. A great majority of the people of the United States, both in town and country, judged by the conditions of farmers and industrialists, as well as by the test of unemployment, were certainly much worse off a year after the slump than they were in the early stages of the boom.

Money, for which speculators had paid such extravagant rates in the first nine months of 1929, became superabundant in the following year, being in demand neither for the Stock Exchange nor for business. Many millions of idle funds, it is known, were placed by New York bankers on the London money and discount markets to earn a modest 2 to 2¼ per cent. The market for domestic bonds returned for a time to favour; but the investment demand for foreign bonds shrank, and towards the end of 1930 dollar bonds of South American States and Germany were shipped wholesale to London and sold at any price they would fetch. Thus, from a purely financial point of view, the difficulties of the world have been very much increased by the boom and slump in Wall Street.

More important still has been its effect on consumption; for, though the American tariff is practically prohibitive against most classes of manufactured goods, the United States is the largest consumer of many important foods and raw materials, such as coffee, rubber, tin, silk, copper, etc. The rapid decline in American purchasing power, after the Wall Street slump, hit first of all the motor and housing trades, and thence extended rapidly to all branches of mining and manufacturing throughout the United States. This gave an impulse to the fall in commodities, which has crushed down millions of cultivators and miners in all parts of the world. The slump in coffee upset the finances of Brazil, and

brought to a head the discontent which was to culminate in civil war and revolution. The slump in wheat and maize played havoc with Argentina, Canada, Poland, Roumania and indeed all countries which depend for their prosperity on the export of cereals. A slump in silk (due in large measure to the reduced purchasing power of the United States) and a fall in silver brought about a severe industrial crisis in Japan. The low price of cotton had distressing consequences not only in the Southern States and Egypt, but also in India, where a still more severe collapse in jute impoverished the great province of Bengal. The fall in rubber brought temporary ruin upon cultivators throughout Malaya, Ceylon and the Dutch East Indies. At the price of about four pence per pound, to which rubber fell in the autumn of 1930, hardly any rubber plantations could show a profit. Most of them were forced to curtail their staffs, and many of them closed down.

But I need not dwell further on the plight of farmers and cultivators all over the world, as it has been enlarged upon in a previous chapter. The efforts of governments or combinations of producers to bolster up prices¹ previous to and since the collapse have undoubtedly accentuated and aggravated the depression. The Stevenson rubber scheme had raised prices for a time artificially, and stimulated production in the Dutch East Indies. The Sao Paulo Coffee Valorization scheme, financed largely by London and

¹ This process is usually called "stabilization" or "valorization."

New York investors, had a similar effect; for by raising the price of coffee it encouraged coffee cultivation in Colombia and many other countries. The holding up of wheat in Canada and the United States, and the holding up of cotton by the Southern planters, with the assistance of the Farm Board, and also by the Egyptian Government, help to account for the severity of the recent collapse.² The operations of the copper combine in the United States, which only broke down towards the close of 1930, had similar consequences; for the curtailment of output and closing of copper mines all over the world were a direct result of a huge accumulation of stocks which could only be got rid of by sales below the cost of production.

It seems clear from this necessarily imperfect survey that the great Wall Street collapse, striking a world financially crippled by the Great War and staggering under a load of reparations, war debts and war taxation, was not merely an occasion but a cause of the depression that swept over trade. The heavy drop in American imports and exports is paralleled by similar movements in the overseas trade of Great Britain and Japan and indeed prac-

² Early in December, 1930, American cotton at Liverpool fell to fivepence farthing per lb. At the same time Egyptian Sakellaridis slumped to sevenpence farthing per lb., the lowest price for many years. In December, 1929, Sakellaridis had sold at over 27 pence, and only a month before the slump at over 17 pence per lb. A panic seized the Alexandria Cotton Exchange in the second week of December, 1930, and jobbers' business was suspended.

tically all countries. It is true that the fall in values gives an exaggerated impression of the decline in volume; for in all gold standard countries the index number shows that the decline of wholesale prices, which began several years earlier, became precipitous after the collapse in Wall Street.

Thus if, with the aid of the London *Economist's* index number, we compare the average level of wholesale prices in 1913 (taken at 100) with other years, we find that the figure for 1924 is 166.2; that for 1928 is 140.9; that for 1929 is 132.8, while the figure for October, 1930 (published in the *Economist* for November 8) is 104, against 129.6 for October, 1929. Another *Economist* index number takes as its basic figure the year 1927 at 100. This had fallen by the end of October, 1929, to 90.2, and by the end of October, 1930, to 72.4, so that the level of wholesale prices had declined between October, 1929, and October, 1930, by no less than 19.7 per cent. This fall of nearly 20 per cent fairly represents the world movement of gold (wholesale) prices. But it must be remembered that in most countries retail prices lag far behind wholesale. Further, while the purchasing power of gold was rising rapidly, that of silver was falling; and in countries with an inconvertible paper currency, prices have in many cases risen, owing to excessive issues of paper money by bankrupt, or semi-bankrupt, governments like those of Russia and some of the Latin-American Republics. Those who attribute the depression of trade in gold

standard countries mainly to the fall in gold prices, may be asked why similar or worse conditions have prevailed in countries which have "enjoyed" rising prices, thanks to a depreciating silver or paper currency. This consideration makes it clear that other causes have been at work—some political, such as war debts and tariffs, some purely economic, such as the rigidity of wages and the failure of retail prices to respond rapidly to the downward movement of wholesale prices.

That retail prices should lag behind wholesale is inevitable, and government intervention on behalf of the consumer usually does as much harm as government intervention on behalf of the producer. In some countries you have the absurd spectacle of governments attempting at the same time to raise prices by tariffs, or valorization schemes, for the benefit of the home producer, and to fix retail prices at a low level for the benefit of the home consumer! The subject deserves more detailed description; but it is enough for my purpose here to lay down the common-sense proposition that, until the fall in wholesale prices reaches the consumer and leads to increased consumption, no general recovery of trade and enterprise from a deep depression can be anticipated, apart from other possible remedies.

This brings me to the question: Are any remedies available? I think there are some, and it is to be hoped that before long they may be adopted, while those measures which have aggravated the disease

. will be abandoned. Of remedies which distressed countries can apply without foreign assistance, I would mention two: first, public economy and retrenchment of all wasteful and unnecessary expenditures; secondly, fiscal reform, where customs and excise duties, or any other regulations, are obstructing (externally or internally) freedom of trade.

Of remedies which can be brought about only by co-operation between intelligent governments in the coming year (1931), the most important in my judgment are those which relate to reparations, war debts, and gold reserves.

Some financial experts have claimed that, with the acceptance of the Young Plan and the establishment of the Bank for International Settlements, the problem of Reparations was finally solved, just as Mr. Mellon, the Secretary of the Treasury at Washington, has asserted more than once that the War Debt Treaties made by the United States with its European debtors (though mostly bargains and compromises) are unalterable like the laws of the Medes and Persians. Whether the war debts and reparations are fair or unfair, reasonable or unreasonable, practicable or impracticable, right or wrong, history must decide. That the burdens on debtors should be allowed to grow with the appreciation of gold is, however, plainly unjust and impolitic. But even if reparations were originally just, we have also to ask whether the people and Government of Germany can be expected to transfer, for the next fifty-nine

years, a series of annual indemnity payments to their enemies in the late war, of sums representing a present value of 1,700 millions sterling.

The original German indemnity, as announced in the House of Commons soon after the war, was to have been 24,000 millions sterling. That was reduced soon afterwards to 12,000 millions, and then by the London Agreement of 1922 to 6,600 millions. The Dawes Committee of 1924 declined to determine the amount of the indemnity until further experience had been gained of the amounts Germany could transfer without dislocating the foreign exchanges. One good reason for the reduction of the German indemnity from 24,000 to 1,700 millions sterling—at which figure it now stands under the Young Plan—is that, in the long run, an indemnity (like a war debt) can only be transferred by the exporting of surplus goods or services from the debtor to the creditor country. It cannot be exported in paper currency. Of course, Germany might export her gold reserve; but that would only amount to a tiny fraction of the indemnities or reparations at their latest and lowest figure.

There is no essential difference between reparations or indemnities and war debts. The really important questions to ask, when it comes to a study of public debts are, *first*, is the debt productive or unproductive, and *secondly*, is it internal or external? In private life, a debtor can easily repay a debt by which he has made money—a debt which he has put to productive use by spending what he has borrowed

on something he needs for his business. But if what he has borrowed has been squandered, it is quite another matter. The more he borrows for wasteful purposes, the less can he repay. So it was with the belligerent nations in the late war. The longer the war went on, the less able was Germany to pay indemnities, the less able were France and Italy to pay back what Great Britain had lent them, and the less able were Great Britain and the other allies to repay what the United States lent towards the end of the war in food and munitions at inflated prices.

Payment of an external debt, if large, may drain a country of its gold and destroy the exchange value of its currency. So, in order to make it easier for Germany to pay the huge annual sums required in reparations without dislocating the gold exchanges, it was agreed that she might pay partly in kind, and especially in coal and in dyes. The coal reparations hit British trade very hard; for large quantities of British coal, which before the war went to France and Italy, are now displaced by German reparations coal. This accounts in large measure for the depression of the British coal trade, and explains why so many English business men would like to see an end put to German reparations as well as to inter-allied war debts.

In connection with war debts and indemnities, the question whether a creditor is willing to receive is almost as important as the question whether a debtor is able and willing to pay. Thus the United States

has shown by its protective tariffs since the war—many of the rates rose to prohibitive heights in the recent Hawley-Smoot Bill—that it is unwilling to receive British, French, Belgian or Italian goods in repayment for the munitions and commodities lent to European allies in the last stages of the war. America prefers to force European debtors to ship gold, though it was not gold that she lent. But surely a demand for debts or reparations is logically and equitably, if not legally, inconsistent with a refusal to receive them, or with a claim to tax the goods in which payment must be made. This was the view taken by Washington, Jefferson and Hamilton when they excused American citizens from paying commercial debts admittedly due by treaty after the War of Independence.¹

Although the war loans of the United States to the continental allies were much more than double their war loans to Britain, Britain so far has made the great bulk of the payments; and the terms of the debt treaty with Britain are twice or thrice as onerous and unfavourable as the terms made with France and the other allies. Britain's annual payments to America are 33 millions of gold, rising to 38 millions, which is about half the total of German reparations to all the allies. Happily, a way seems to be opening for a revision and reduction of these intolerable burdens,

¹ See my *Life of Thomas Jefferson* (The Macmillan Co., New York, 1926), pages 300-304. The dispatch (May 29, 1792) argues that a creditor must not by tariffs and prohibitions deprive its debtors of the means of payment.

which threaten to ruin Europe and are clearly, in part, responsible for the fearful slump which has played havoc with the business and prosperity of the United States. This hope of relief is shared by Sir Charles Addis, British representative and Vice-Chairman of the Bank of International Settlements, to which Europe looks for means of alleviation. He agrees that it is true in a sense to describe the new bank as a Reparations Bank, because one of its functions is to collect and distribute the German annuities under the Young Plan during the next 59 years. But the bank may also become a co-ordinating link between the leading central banks of the world. It is by co-operation between the central banks, in part, that gold can be economized and the collapse in prices arrested. But another important function of the bank is to act as a clearing house for international debts. After the annuities have been received, all the inter-European debts, such as those of France and Italy to England, will in future be settled by an entry in the books of the Bank for International Settlements. When the inter-European debts have been cleared, the bank will have to pay over the war debts of Europe to the United States.

"The result of this arrangement," said Sir Charles Addis in a recent address, "if carried into effect, will be to link up the German indemnity with the debts due by Europe to the United States. Germany will, in fact, take upon her own shoulders the burden of discharging for account of the European powers the

entire amount of their debt to the United States, by a series of 59 annual payments, amounting at the peak to £80 millions a year. Whether an arrangement so one-sided and so much at variance with all our previous experience of the bases of international trade is likely, in the long run, and when all the attendant circumstances are taken into account, to be wholly beneficial to the sole creditor, or even permanent in its operation, only experience will show. It was no doubt an inkling of some consideration of this kind which induced the Powers to agree that, if and when any abatement is made of the claims on them by the United States, it is not the Powers but Germany who is to benefit to the extent of two-thirds of the net relief granted to the Powers as regards the Annuities of the first 37 years, and to the whole extent of such relief as regards the last 22 years."

Until the United States is ready to make a downward revision of the war debts by applying a price index number to gold, or to give Great Britain, in view of her really enormous payments and financial sacrifices, most-favoured-nation treatment, the allied war debtors might take a leaf out of the reparations book, and ask the United States to accept payments in goods (untaxed) for at least a considerable portion of the annual war debt instalments.

Another remedy for the trade slump has been pressed upon the notice of economists and governments by the distinguished Swedish professor, Dr. Gustav Cassel, supported in varying measure by a

long train of more or less critical disciples in Europe and America, including such leading authorities as Sir Charles Addis, Sir Henry Strakosch and Lord D'Abernon. For the benefit of English readers, Professor Cassel formulated his opinions on the control of money and credit and the functions of central banks in an article which appeared in the *Monthly Review* of Lloyd's Bank for March, 1930. In that article the professor recalled a view, which he has repeatedly expressed, that ever since the war a growing scarcity of gold has threatened the world, resulting in "a continuous lowering of commodity prices" and in consequence thereof "a general economic depression." Not everyone will agree with the view that a gradual fall of prices, which gives the working classes the benefit of cheap food and manufacturers the benefit of cheap raw materials, is always or necessarily "a calamity." But if we accept this dogma, we are next invited to swallow another, namely that "the only *conceivable* means of preventing this calamity is a systematic reduction of the monetary demand for gold." Other means can certainly be *conceived*. Let me give one example. If a sufficient number of countries would adopt symmetallism and issue token currencies and paper money, based not upon gold but upon bars composed (let us say) of one ounce of gold and nineteen ounces of silver, the threat of a growing scarcity of gold would be removed. That, however, need not detain us; for in the present circumstances a gold-economizing policy—the policy

advocated by Professor Cassel ever since 1920—is far more practicable and also highly desirable—as a means of arresting the fall of prices and counter-acting the accumulation of monetary gold in the United States and France.

Professor Cassel has two practical proposals. He wants every country to follow Great Britain in abandoning the use of gold coins as a circulating medium, thus giving up the principle of internal convertibility, and contenting itself with the external convertibility of a gold exchange standard. His second gold-economizing measure demands co-operation between the central banks, to reduce their requirements as to gold reserves, as recommended by the Genoa Conference in 1922. Professor Cassel believes that the Bank of England has been a leader in this direction, and that under its leadership “this policy has undeniably attained very valuable results.” But he seems to doubt whether a gold economizing policy can be made a success without the co-operation of the United States, as that country is not only a great creditor but is also possessor of the largest stock of gold in the world. He thinks that America is to some extent unaffected by gold movements and able to “determine the value of the dollar independently.” But at present, it may be argued, the one effective way of bringing the American Government and Treasury to choose between the reasonable alternatives, on the one hand, of accepting goods instead of demanding gold for their debts, or, on the other, of

cancelling the war debts altogether, is to let gold flow freely from Europe until the Federal Reserve Board is saturated with bullion and Wall Street with credit.

But perhaps Professor Cassel's central doctrine is that central banks can, by co-operating, regulate the purchasing power of gold and of gold standard currencies. He puts forward his belief in an ideal currency of an international character, by which the value of gold would be stabilized on the basis of a price index number. When that ideal is achieved, he says, "the world would possess a monetary system so infinitely superior to anything it has ever seen before, that it could safely regard this problem as solved and proceed to develop its economic forces on the solid monetary foundation thus laid." To opponents of a managed currency he replies: "the only alternative to co-operation is a reckless competition for gold, in which every country tries to secure to itself as much gold as possible, with the result that the scarcity of gold is aggravated in a most unnecessary way, and all countries have to suffer from a depression of prices."

To perform the function of stabilizing prices, or regulating the purchasing power of its currency, a central bank, in Cassel's view, has merely to keep its hand on the rate of discount and lower or raise it to meet "the actual situation of the capital market of the country." This lever might work effectively if France and the United States would agree to economize gold

and allow their excessive hoards to be added to the monetary stocks of the world. But international co-operation is indispensable.

Among those who have gone some way with Professor Cassel is Sir Charles Addis, who adds to wide banking experience an acute insight into monetary problems. In a recent address he described the newly established Bank for International Settlements, of which he is a Vice-Chairman, as "the Bank of the Central Banks," just as a central bank is the bank of domestic banks. In his opinion, as in that of Professor Cassel, the downward trend of prices is a "serious menace," which "if allowed to go on unheeded, must inevitably check enterprise and retard economic recovery." While admitting that some causes of the decline are beyond control, he maintains that the monetary factor is always present, and that it is the business of the central banks so to adjust the supply of monetary gold as to maintain the value of gold at an approximately stable level.

A memorandum by Sir Henry Strakosch,¹ published by the *Economist*, supplied statistics in support of the view that a shortage of gold is largely responsible for the decline in prices. This theory is associated with another—that, by reducing the rate of discount, central banks can cheapen money and revive trade. A contrary view was expressed as follows in the city notes of the *London Times*, March 8, 1930:

¹ See supplement to the *Economist*, July 5th, 1930.

In some quarters rather strange comments have been made on the reduction in bank-rate, and it seems to be assumed that trade, which has been held up by dear money, will now revive with cheaper money. The facts, however, are that the cheapening of money is the result of depressed trade. When trade is active, the demand for money becomes keen and rates are advanced, while the reverse process takes place when trade is depressed. Cheap money is undoubtedly an advantage to borrowers; but it would be wholly wrong to assume that, in consequence of the cheapening of money, trade will automatically recover. Causes much deeper than the price of money are responsible for the present trade depression.

After nine months further experience, it is manifest that cheap money and ampler supplies of gold have failed to conquer the trade depression; and it is worth while asking whether enthusiasts like Cassel have not been putting the cart before the horse, or at least exaggerating the beneficent action of cheaper money in promoting trade revival and spiriting away, as with a magic wand, the incubus of unemployment. The idea that raising prices by artificial means will enrich a country, or the world, is much as if a farmer, having noticed that when the weather is fine, the barometer is high, decided to peg his barometer at "Set Fair," in order to ensure fine weather at harvest. It is curious that Professor Cassel should not see that there is a certain similarity between the method of protection, which he abhors, and the method which he recommends; for both of them aim at raising prices in order to improve trade. The difference

is that a lowering of bank rates aims at stabilizing, or raising, *world* prices, while protection only aims at raising *national* prices within the tariff walls of a given country, in order that local manufacturers may exploit local consumers. If a protective tariff could raise prices abroad as well as at home, one objection to it would be removed.

Another consideration is this—that gold prices depend not only on the size of the gold monetary basis, but also on the size of the superstructure of credit. And credit depends upon confidence and credibility. In an atmosphere of optimism a buying movement may set in and raise prices without much regard to the quantity of monetary gold stocks.

I myself have more faith than the *Times* in the virtue of cheap money; but I do not share the prevalent horror of cheapness and abundance in food and commodities. Then again it seems obvious to me that gold must have something to do with gold prices, just as silver must have something to do with silver prices. If so, the hoarding and sterilisation of gold must tend to raise its value; and it would follow that Professor Cassel's criticisms of American policy are largely correct—at least to this extent, that the United States by its gold debt policy, its currency and credit policy, and its tariff policy, is largely responsible for its own economic troubles as well as for those of its unfortunate European debtors whose payments have been growing more and more onerous ever since the gold debt treaties were signed. But Professor Cassel has misinterpreted the views which

have prevailed at the Bank of England since the war. It may have favoured co-operation in Europe for various purposes; but the Bank of England has certainly not set the world, as it did in pre-war days, a shining example in the economy of gold.

By way of illustration one might cite its almost continuous adherence to the Cunliffe Minimum gold stock (150 millions), which is about four times the gold reserve maintained in normal times before the war, though with a gold exchange standard the risk of an internal drain, or run on the banks for gold, has vanished, while the risk of an external drain (like that of 1907 to the United States) is no greater than in pre-war years. Professor Cassel might rejoin by pointing to the recent action of the Bank of England. Did it not reduce its rate five times in as many months? But in the opinion of those who belong to the school of Professor Cassel in England, and of many practical city men, the Bank of England has on almost all these occasions been too late. It has lagged behind the Banks of Amsterdam and Paris, as well as the Federal Reserve Board; and London has therefore to some extent lost its old differential advantage over other money markets.

The fifth reduction of the bank rate to 4% (in March, 1930) was really imposed on the Bank of England by the action of the Treasury. Since the war, the London discount market has been more dependent than ever before on Treasury bills, and a scarcity of Treasury Bills, added to a scarcity of commercial bills, naturally forces down the discount rate.

When the open discount rate falls much below the bank rate, the official bank rate becomes ineffective, and the Bank of England loses control of the market. The Chancellor of the Exchequer, Mr. Philip Snowden, in November, 1929, issued a Five Per Cent Conversion Loan, a long-dated security, the proceeds of which he used to reduce short-term borrowing; and, in consequence of this measure, the volume of Treasury Bills was much diminished. As a result, the Treasury Bill rate and discount rate declined in the second week of March, 1930, to three and one-third per cent, and consequently the Bank of England's official rate was practically forced down to four per cent. Thus the initiative was taken by Mr. Snowden and not by Governor Norman. Further declines in the market rate of discount, and a general cheapening of money all over the world brought down the official rate of the Bank of England to 3 per cent on May 1st (1930), at which rate it remained up to December, 1930, while the official rates in the United States and France stood at $2\frac{1}{2}$ per cent.

Our general impressions of the financial and industrial sequel are confirmed by an address delivered by Mr. T. W. Lamont, at a gathering of the Academy of Political Science in New York on November 14, 1930. He said:

There can be no question that the world is just now finding itself in a severe industrial and commercial depression. Looking at this depression as a whole, and not simply as it

concerns our own country, the general consensus of opinion ascribes this world-wide phenomenon chiefly to the following causes:

1. To production outrunning consumption, not only in many basic commodities, such as cotton, wheat, copper, rubber, silk, sugar and oil, but also in many manufactured products.

2. In part to the effort made in many parts of the world to hold up commodity prices artificially, whether in rubber, cotton, wheat, coffee, copper, or what not. When prices for such commodities finally gave way, the severity of the business collapse was accentuated.

3. To the fall in the price of silver and thus in the purchasing power of perhaps one-quarter of the world's population as represented by India and China.

4. To a shifting, on an almost unprecedented scale, of gold holdings among various countries. Thus, from the beginning of 1929 to date, the Bank of France and the Federal Reserve Banks of America have increased their gold reserves in the aggregate amount of approximately \$1,200,000,000, a large part of this being drawn from the central bank reserves of other countries.

5. The current political unrest in many quarters of the globe, including notably India, China and South America.

6. In certain countries of the globe, especially America, to a spirit of rampant speculation. For some years many people lost interest in investing their money in good bonds returning a fair rate of interest. They wanted quick speculative profits, with the inevitable result that everybody knows.

Mr. Lamont added: "We have complicated this situation of ours by hanging the load of a new Tariff Act around our own necks."

Shortly afterwards, in *The Annalist* of New York, Mr. Benjamin Baker attributed the boom and the

collapse mainly to the gold and credit inflation. He wrote :

The first and most inclusive aspect both of our prosperity and our misfortune is that it was based upon and largely due to the flood of gold that came to us from abroad. The business disasters of 1920-21 were most of all due to our misuse, as a basis for bank credit, of the inflow of foreign gold which came to us in 1916-17. The writer believes that the disaster of 1929 was due in a similar way to the gold inflow of 1924 and later years. It is probable that the economic historians of the future will find in our approximate monopoly of the world's monetary gold the ultimate reason for both of these business catastrophes.

While deprecating the Anti-Trust Laws, Mr. Lamont did not discuss the advisability of restricting speculative dealings on stock exchanges and commodity markets. This is a large and technical subject about which something has already been said in a chapter on speculation. In all probability new laws, hastily devised by democratic bodies during a period of unreflecting resentment, would do more harm than good. But there is, undoubtedly, both in the United States and in Great Britain an urgent need for reforms in the company laws and for a restriction in the facilities offered to unscrupulous and incompetent company promoters, whose flotations during a boom are responsible for much loss and waste of capital. Another crying evil is the "guinea pig" director. Any government which could provide for raising the standard of competence on

. the boards of public companies would deserve well of the nation.

It is conceivable that useful measures might be devised for restricting marginal speculation and for regulating the investments of banks in the interests of their depositors. It is also conceivable that something might be done by governments or central banks, with the aid of newspapers and broadcasting, to supply investors with useful advice and warnings. The general value of independent and well-informed criticisms in the newspaper press cannot be exaggerated.

With American judgments on the crisis and the depression may be compared those of European authorities. Some have been cited on previous pages. It happened that on December 5, 1930, a few days after Mr. Lamont's address, the International Chamber of Commerce in Paris devoted a whole session to discussing the world economic crisis, its causes and possible remedies. At the end of the proceedings a long resolution was passed, which may be summarized as follows:

During the past six months trade depression has become greatly aggravated, making even more evident the economic interdependence of all nations. This depression has been caused by (*a*) over-production in relation to population; (*b*) the sharp fall in costs of raw materials while retail prices have not moved downwards in proportion; (*c*) agricultural depression; (*d*) unemployment; (*e*) political unrest; (*f*) the closing, partial or complete, of some of the world's most important markets; (*g*) the slow readjustment of national

to international conditions owing to varying bases of monetary stabilization; (*h*) checking of enterprise by unusual spread between long and short term money rates; (*j*) the heavy fall in the price of silver; (*k*) the forcing on world markets of large quantities of grain, raw material, and semi-finished articles by Soviet Russia at prices far below the normal cost of production; (*l*) taxation; (*m*) excessive incursions of the State into the domain of private enterprise; (*n*) the restriction of emigration and immigration.

The resolution further declared that the responsibility for improvement rested upon business men and financiers, from whom courage and enterprise were required; it called for international economic co-operation; and it announced the intention of the committee to make further investigations in order to discover (and apply to the limit of its abilities) whatever remedies might be available.

M. René Duchemin, president of the Confédération Générale de la Production Française, addressing the meeting, said—whatever might be the real causes of the crisis—the *prima facie* conclusion was that world production far exceeded the purchasing power of the consumers, especially in the agricultural industry. In his opinion the principal remedy lay in simultaneous action to increase the world purchasing power and in widening markets. This, he argued, could best be achieved by the formation of cartels and ententes wherever possible—a strange conclusion, seeing that the real purpose of cartels and ententes is to raise the prices of particular commodities, thus of necessity reducing the purchasing power of consumers.

Sir Arthur Balfour, chairman of the British National Committee, drew attention to the immobility of labour and the rigidity of wages, which had been aggravated by the interference of the State and the trade unions. Another grave cause of depression he found in the network of international payments, such as war debts and reparations. The sooner the world applied the spirit of the Balfour note (suggesting all round cancellation) to these obligations, the better it would be for all concerned. He was convinced that most countries would have to face a reduction in wages. To labour arguments about the unearned advantages of the *rentier* class he could only ask what other class has lost more, on the whole, during the last 50 years. If trade was to be restored, it was essential to make it worth while for those who had capital and knew how to use it, to risk their means in new ventures. The discouragement of the capitalist was in fact one of the main causes of modern unemployment.

We have traced the Wall Street slump and the trade depression for a full year, during which there was no permanent recovery in the American stock markets or those of Europe. Indeed, the level of Wall Street quotations had fallen, after twelve months, lower than in the crash of November, 1929. The trade depression has deepened and widened. The precipitous fall in commodity prices has induced so acute an observer as Lord D'Abernon, a man of the world equally skilled in diplomacy and finance, to argue (at Liverpool, November 15, 1930) that

international measures must be taken speedily to relieve debtor countries. Otherwise he foresaw "the certainty of non-payment and bankruptcy all over the world." His argument was that a reasonable creditor facilitates payment by his debtor, whereas the United States (forgetting the principles of Jefferson and Hamilton) "has impeded payment of war debts by imposing heavy duties on the goods of her debtors and at the same time depressing the price of these goods by raising the value of gold." In this way, and by accumulating, along with France, about three-fifths of the monetary gold supplies of the world, America had aggravated the danger of a general debt failure and of a still greater trade collapse, from which she and Great Britain, as the chief creditor countries, would be the chief sufferers.

INDEX

- Addis, Sir Charles, 161, 163, 166.
 Aldrich, Senator, vi.
 America and war debts, 161, 162.
 American Can, 28, 37.
 American Tel. & Tel., 34, 37.
 American Tobacco, 37.
 Anaconda Copper, 31, 37.
 Argentina, 108, 112, 114, 153.
 Aristotle, 125.
 Athens, 125.
 Australia, 109, 115.
 Ayres, Col. L. P., 19.
- Babson, Roger W., 19, 31.
 Bagehot, Walter, v, 100.
 Balfour, Sir Arthur, 80, 175.
 Bank for International Settlements, 157, 161, 166.
 Bank of England, 9, 37, 61, 82, 98, 101, 104, 105, 129, 169, 170.
 Bank of France, 61, 79, 82, 90, 171.
 Bank bills, 99.
 Bank failures, 72, 89.
 Bank rate, London, 6, 37, 52; Norway, 52; Reichsbank, 37; function of, 104, 105, 106; and prices, 165-170.
 Bankers' acceptance rate, 25, 26, 94.
 Banking pool, 33.
- Beaverbrook, Lord, 112, 114.
 Bell, W. H., 84, 85.
 Bill of Exchange, definition of, 98, 99.
 Blunt, Sir John, 129.
 Bogen, Jules, 93.
 Bonds, 66, 67, 152.
 Boom in Wall Street, 2-8.
 Brazil, 109, 112, 113, 119.
 Brokers' loans, 27, 37, 44, 48, 53, 66.
 Brookhart, 61.
- Call of England*, the, 133.
 Call money market, 93; rates, 7, 25, 26, 48, 51, 55, 94.
 Canada, 112, 153.
 Carroway Bill, 144 (footnote).
 Cassel, Gustav, 162-169.
 Central Banks, co-operation of, 165.
 Certificates of indebtedness, 95.
 Chamber of Commerce, U. S., 146.
 Cheque, 103.
 China, 78, 83, 84, 85, 86, 110, 171.
 Clay, Professor Henry, 138.
 Clearing House certificates, 57.
 Coffee, 35, 114, 119, 121, 152.
Commercial and Financial Chronicle, viii, 9, 13, 39, 40, 64, 117, 145.
 Commercial paper, 95, 96.

- Committee on business conduct, 46.
 Commodity exchanges, 144.
 Company Law reform, 172.
 Copper, 53, 120, 152, 154.
 "Corner," 125.
 Cotton, American, 117-119, 121, 134-136, 153, 154 (footnote); Egyptian, 110, 133, 153, 154; Indian, 153.
 Crisis, American, of 1907, v.
 Cunliffe Minimum, 9, 62, 169.
 Currency, ideal, 165.
 Cutten, Arthur W., 21.

 D'Abernon, Lord, 163, 175.
 Dawes Committee of 1924, 158.
 Discount rates, 87, 105, 106.
 Duchemin, M. René, 174.
 Dun & Co.'s record, 89.
 Dutch East Indies, 110, 153.

Economist, v, viii, 8, 82, 100, 166.
 Egypt, 110, 153, 154.
 Emery, H. C., 131, 137.
 Exports, U. S., Oct., 1929, 48, 154.

 Failure, first stock exchange, 51; commercial, 1929 and 1930, 89; banking, 72, 89.
 Farm Board, 117, 118, 119, 144, 154.
 Federal Reserve System, vi, 3, 6, 31, 47, 57, 95, 96; rediscount rate, 15, 25, 34, 37, 47.
 First National Bank of New York, 24.
 Fisher, Irving, 12, 15, 18, 21, 41.
 Florida boom, 42.
 Ford, Henry, 52.

 Ford Motor Company, 39.

 Gambling, 10-13.
 Garrett, Paul Willard, 32.
 Gates, John W., 60.
 General Electric, 17, 31, 37.
 General Motors Corporation, 24, 31, 37.
 German indemnity, 158-161.
 Germany, 90, 111, 151, 159, 160, 161.
 Giffen, Sir R., 139.
 Glass, Carter, 28, 61.
 Gold, stock of, 91, 169; reserves, 157; economy of, 102, 164, 165; scarcity of, 163; standard, 103; exchange or bullion standard, 105, 169; accumulation in U. S., 150, 166; in France, 166.
 Great War, vii, 55, 149, 154.

 Hadley, Professor, 138.
 Hamilton, 160, 176.
 Hatry, crisis and collapse, 8, 61, 80, 89.
 Hawley Smoot Bill, 160.
 Hitlerites, 90.
 Hong Kong, 83, 84.
 Hoover, President, vii, 14, 31, 48, 51, 54, 59, 65, 116.

 Imports, U. S., Oct., 1929, 48, 154.
 Income tax, proposed reduction, 47, 59.
 Index numbers, 155, 165; American Bureau of Labor, 120; *Economist*, 121, 155.
 India, 83, 85, 86, 108, 171.
 Investment trusts, 18, 31, 32, 40.
 Italy, 90.

- Japan, 86, 109, 153.
- Japan Weekly Chronicle*, 140.
- Jefferson, 160 (and footnote), 176.
- Jute, 110, 153.
- Juvenal, 10.
- Keynes, Maynard, 28, 29, 81.
- Korea, 140, 142.
- Lamont, T. W., 25, 170, 171, 173.
- Latin Union, 83.
- Leaf, Dr. Walter, 103.
- Liverpool Cotton Exchange, 133.
- Listener*, the, ix.
- Loans, by reporting member banks, 40; to large depositors, 40; calling of outside, 40, on security collateral, 68.
- Lombard Street, 78
- London Agreement of 1922, 158.
- Lucretius, 64 (footnote).
- Luxury trades, 11.
- Lysias, 125.
- Malaya, 78, 86, 108, 116, 153.
- Margins, fifty per cent, 26; lowered to twenty-five per cent, 34.
- Marshall, Professor Alfred, 131.
- Mellon, Mr., 157.
- Merchant of Venice*, 125.
- Merchant Venturers, 125, 126.
- Mitchell, Charles E., 19, 21, 22.
- Monetary Commission, vi.
- Money, cheap or dear, 167, 168; markets, 91; and prices, 163; rates in New York, 25, 87, 152.
- Money post, 93.
- Morgan, J. P., 18.
- Morgan J. P. & Co., 23, 28, 33.
- Morton, H. V., 133.
- Motor-car industry, 52, 149, 152.
- National City Bank, 7.
- National debt, 129
- New York Evening Post*, 34, 60.
- New York Herald Tribune*, ix, 21, 31, 41, 45, 56, 66, 67.
- New York Times*, ix, 7, 21, 23, 34, 38, 39, 53.
- New York World*, ix, 27, 36, 44, 47.
- New Zealand, 115.
- Nicholas Nickleby*, 123.
- Norman, Montagu, 170.
- Noyes, A. D., 24.
- Osaka Rice Exchange, 142, 144.
- Oustric, 89.
- Overend Gurney, v, 104, 105.
- Over-the-counter loans, 96.
- Panic in New York, Oct., 1929, 23; of 1907, vi, 57, 101, 104; Black Friday of 1869, 27; Black Thursday, 27; Black Wednesday of 1929, 66.
- Peru, 115.
- Pixley & Abell, 83.
- Poland, 111, 153.
- Posthumus, N. W., 126, 127.
- Prices, 165.
- Radio broadcasting, 41.
- Rediscount rate, 37, 47, 94.
- Remedies suggested, 157.
- Reparations, 79, 151, 154, 158-162.
- Reparation bonds, 90.
- Rice, 140-142.
- Rockefeller, John D., 38, 46.
- Roumania, 110, 111, 153.

- Rubber, 86, 87, 110, 152, 153.
- Santos Coffee Bolsa, 35.
- Sao Paulo, 35, 113, 153.
- Search, H. W., v, 101.
- Shanghai, 83, 84, 85.
- Silk, 87, 152, 153.
- Silver, 83, 153.
- Sinaia Conference, 110.
- Sisal hemp, 115, 116.
- Six Year Trend, 70.
- Smith, Adam, 123, 130.
- Smollett, 130 (footnote).
- Snowden, Philip, 170.
- South Africa, 115.
- South Sea Company, 130.
- Soviet Bread Trust, 125.
- Speculation, 9; losses in, 12; in future essential, 145; a natural propensity, 6, 124; proposals for checking, 61, 146, 173.
- Speculators, ruin of, 25.
- Stamp, Sir Josiah, 28.
- Standard Oil of New Jersey, 37, 46.
- Stern, Laurence, 27, 47.
- Stevenson Rubber Scheme, 116, 119, 153.
- Stock Clearing Corporation, 94.
- Stock jobbing, origin, 128, 129.
- Strakosch, Sir Henry, 163, 166.
- Symmetalism, 163.
- Tariffs, 120, 148, 152, 156, 160
policy of U. S., 168.
- Thales of Miletus, 125.
- Thomson, Charles Poulett, 102.
- Time money, 25, 95.
- Times*, London, 87, 88, 166, 168.
- Tin, 110, 121, 152.
- Tokyo Rice Exchange, 142.
- Treasury Bills, 98, 100.
- Tulip speculation in Holland, 126, 127.
- United Dominions Trust, 82.
- United States Chamber of Commerce, 146.
- United States Steel, 28, 31, 37, 45.
- Wages, rigidity of, 175.
- Warburg, Paul, vi, 4, 5, 6, 41, 96, 97, 98.
- War debts, 79, 151, 154, 156-162, 165, 175, 176.
- Warsaw Conference, 111.
- Washington, 47, 59.
- Washington, George, 160.
- Welby, Lord, 100.
- Western Union, 34.
- Westinghouse, 31, 37.
- Wheat, 117, 119, 121.
- Whitney, Richard, 28.
- Wholesale prices, 48, 121, 155.
- Willis, Professor H. Parker, 92, 93.
- Wilson, Ex-President, vi.
- Wool, 119, 120, 121.
- Yoshimura, Mr., 143.
- Young Plan, 157.

